

# MICROCOSM-MACROCOSM ANALOGY IN RASA.IL IKHWAN A.-.AFA. AND CERTAIN RELATED TEXTS

## . INTRODUCTION

In this study, the Islamic idea of man will be approached from the perspective of the microcosm-macrocosm analogy. The idea that the human being epitomizes the surrounding reality was common in various philosophical, mythological and religious traditions before the Islamic era. In the writings of mediaeval Islamic thinkers, it received a wide range of interpretations which influenced cosmological, epistemological and overall scientific views. The authors of Rasa.il Ikhwan a..afa. laid special emphasis on the topic in their encyclopaedic work and had a crucial position in the development of Islamic microcosmism. The microcosm-macrocosm analogy was an essential element also in many alchemical and astrological writings and formed a part of the worldview of various Sufi authors. In a minor role or as a mere figure of speech it can be found in most of the mediaeval Islamic philosophical and scientific traditions.

The main purpose of this study is to provide by close reading a systematic presentation of the meaning and use of the microcosm-macrocosm analogy in Rasa.il Ikhwan a.-.afa... I aim to define what the contexts in which man is treated as a microcosm tell about the idea of man and how microcosmism is employed in the description of the human being. My secondary aim is to examine the position of the Ikhwana.-.afa.

in the development of the analogy in the Islamic tradition by comparing their views with other relevant texts from the ninth to the thirteenth centuries. The study pertains to the field of Islamic studies and – rather than philological analysis of the texts – the theme will be approached from the perspective of intellectual history.

In this chapter, I will define what has been meant by microcosmism and how it is understood in this study. First I will provide a compact definition of the idea. Then I will turn to the history of the analogy and give an overview of its development, concentrating on traditions which I consider influential in the Islamic context. After that, the focus will be on the ways the idea has been classified by previous scholars. These classifications will also work as the conceptual framework in this study. Lastly, I will describe the division according to which the analogy will be approached in this study. In the fourth subsection, the specific purposes of this study will also be presented.

## . DEFINITION OF MICROCOSMISM

“Microcosmic idea”, which will in this study be used synonymously with “microcosm-macrocosm analogy” and “microcosmism”, refers to the idea that features, parts or relations appearing in a bigger entity are found summarized in some smaller unit. Rudolf Allers defines microcosmism in the following way: “One vague and broad conception is shared by all authors who ever speculated on the microcosmus and its relation to the macrocosmus. The former, which the Latin authors usually call *minor mundus*, has certain features or principles in common with the macrocosmus or the universe.” (Allers : ) Hence, the basic idea is correspondence or similarity between two entities. The way these two entities are defined restricts the examination so that we cannot include any kind of analogies.

In its philosophical interpretations, microcosmism is usually considered to be a correspondence between the human being and the macrocosm, and the focus is on man as a/the microcosm. As George Perrigo Conger puts it, it is thought that “man is a microcosm, or ‘little world,’ in one way or another epitomizing a macrocosm, or ‘great world’ – i.e. the universe or some part thereof” (Conger : xiii). Although my approach is not purely philosophical, in this study the examination is limited to the contexts in which the role of the microcosm is played by man.

The next question, then, is how to define “macrocosm”. As it stands in Conger’s definition, as the counterpart of man, the macrocosm to which he is paralleled does not necessarily refer to the universe as a whole – even though the term “cosmos” indicates the entire universal order – but to any unit larger than man which forms its own separate entity. The macrocosm can be reality in its entirety or some smaller unit, for example, a city or a house. As will be seen, correspondences are usually found and assumed to appear at various levels simultaneously. In this study, the entity placed in the position of the macrocosm is not restricted and the microcosmic idea may refer to the human being as, for instance, a micropolis, a reflection of the order appearing in the heavenly spheres or a miniature of a spiritual castle.

## . HISTORICAL BACKGROUND OF THE MICROCOSMIC IDEA

The notion of man as a summary of the surrounding reality has been developed for millennia in both the East and the West; traces of it can be perceived in Pre-Socratic philosophy as well as in early mythologies. Sources for Islamic microcosmism are manifold and can be divided into three main branches: mythological; philosophical, referring to the Greek tradition; and Judeo-Christian thought. The analogy developed some new forms in all these three periods and, in the Islamic tradition, some influence from each of them can be perceived. However, as will be

seen, these three branches exchanged influence and none of them developed independently from each other.

### .. Mythological Roots of the Analogy

The most ancient elaborations of the microcosm-macrocosm analogy pertain to the field of mythology. It has been found to be one of the very basic concepts in comparative religion, and, among others Mircea Eliade (: –) recognizes the presence of microcosmism in several mythologies and in societies that he refers to as “archaic” or “traditional”. Eliade seems to give the term “microcosm” various meanings, one of them connected to an essential concept in his comparative mythology, axis mundi. The axis mundi is located at the centre of an inhabited area. It is seen as the navel of the known world which summarizes the world order, and, in this way, forms a microcosm. The axis not only brings together the universal order, but also enables communication between different levels of reality, for example, between heaven, earth and hell. The creation started in the axis and the first man was created in it. Eliade finds this view universal and presents examples of it in many traditions. Although seeking these kinds of universal features behind religious traditions is quite hypothetical and Eliade’s claims are open to discussion, various examples of axis mundi that Eliade presents indicate that microcosmism has been known in many ancient traditions.

A form of the analogy mentioned by Eliade, which has a long history as a religious concept, is the Tree of Life. The Tree of Life has been employed as an artistic theme in various traditions, and it has an essential mythological position in ancient Mesopotamia. In Mesopotamian art, the Tree was thought to symbolize, not only the world order, but also the king as the divine personification of the world order, in other words, a portrayal of the microcosmic perfect man. According to Simo Parpola (: –), this interpretation of the tree formed a part of the esoteric tradition accessible to the select ones alone, which in his opinion explains the lack of textual references to it. For the chosen few who were aware of this interpretation, the Tree included all the gods and worked as a means of achieving divine knowledge and perfecting oneself. Parpola examines this esoteric interpretation of the Assyrian Tree of Life and attempts to prove its connections with the later Sefirotic Tree of Life in Jewish mysticism. Parpola states that Mesopotamian religious and philosophical views are “very much alive in Jewish, Christian, and Oriental mysticism and philosophies” (Parpola : ).

Without going into the details of Parpola’s ambitious theory, it can be argued that Mesopotamian religious ideas may have – even if not necessarily in as detailed manner as Parpola proposes – influenced later Middle-Eastern, including

Islamic, thought. Concerning the ways Mesopotamian thought was transmitted to Islamic thinkers, Jaakko Hämeen-Anttila (: –) points out in his study on the sources of the Islamic myths of descent and ascent, that ancient Mesopotamian notions reached the Islamic tradition both indirectly and directly. In addition to Greek and Judeo-Christian sources, ancient Middle-Eastern religious views had been preserved by pagan sects, which still influenced the area of present-day Iraq during the early Islamic era. Hence, although nothing certain can be said of microcosmic themes in particular, some Mesopotamian ideas seem to have been absorbed into the Islamic tradition during the seventh and eighth centuries directly from the living pagan tradition.

Another mythological idea connected with the microcosm-macrocosm analogy which also seems quite universal is the creation of the universe as the reproduction of a living creature – a god or a primordial man. It appears already in the Mesopotamian tradition. In the fourth tablet of *Enuma Elish*, a Babylonian creation myth, Marduk divides the corpse of his conquered enemy, a feminine monstrous figure Tiamat, into two. One part he uses to form the earth and the other to create the heavens. In this way, the body of the goddess is thought to work as a basis for the cosmos and the creation is seen as a kind of human reproduction. The idea that the universe as a whole, or a part of it, is created as a reproduction of a primordial creature's body provides an explanation for the existing correspondence between man and the surrounding cosmos, and sometimes motivates more extensive speculation on microcosmism.

Creation as human reproduction is familiar also in the Iranian tradition. According to R.C. Zaehner (: –), especially in the materialistic branch of Zurvanian Zoroastrianism, the microcosm-macrocosm analogy is important. Zurvan's body, composing the heavenly sphere, is thought to form the macrocosm while man, the microcosm, has been created in its image. A view resembling more closely Islamic microcosmism is found in *Bundahishn*, a cosmogony written during the ninth century and belonging to the most important remaining sources reflecting Sasanian Zoroastrianism. In it, creation is presented as a sacrifice of the cosmic man: the sky is created from his head, earth from his feet, water from his tears, plants from his hair, the Bull from his right hand and the first man, Gayomart, from his seed. The myth also has a sociological dimension – four classes of men are described as being born from the body parts of the cosmic man. (Zaehner : –) As Zaehner (: ) remarks, Zoroastrian microcosmism could be regarded as a combination of Indian mythology and Greek sources. Especially Zurvanian Zoroastrianism adopted Indian elements which were in their texts expressed in terms of Greek philosophy. According to Zaehner, although a parallel for the microcosmic idea in Zoroastrian writings can be found in Indian sources, the term microcosm was not employed in them and the use of

the term in Pahlavi translation (gehan i kodak) must have been absorbed from Greek philosophers.

Iranian tradition is often considered to be an important mythological source for Islamic microcosmism. Geo Widengren ( ) finds some obvious resemblances between the idea in the Bundahishn and that in the Islamic tradition. Examining Manichean references to the analogy, he comes to the conclusion that Indo-Iranian influence might have reached such Islamic thinkers as the Ikhwan a..afa . through Manichean sources. Although Widengren admits that the classical texts are a possible source for some astrological elements in the Islamic microcosm-macrocosm analogy, he quite strongly traces it back to its mythological predecessors and seems to assume that the idea is mostly alien to speculative philosophy. This can be seen, for example, in his statement according to which: “The macro-microcosmic speculations are not without difficulty integrated into the Aristotelian-

Neoplatonic philosophical structure of the Brethren’s [meaning the Ikhwan a.-.afa.] system. The doctrine of perfect correspondence contradicts the emanationist ideas of this philosophical system.” (Widengren : –) This kind of oversimplification is due to Widengren’s definition of the analogy, which is much narrower than in the present study: he restricts the analysis solely to one form of microcosmism: to explicit comparisons (see ..). I agree with Widengren that explicit forms of the idea have received many of their elements from early mythologies, although not even those can be traced back to mythological sources alone. As will be seen in the next subsection, Widengren is not alone in his critical views, but usually Neoplatonic philosophy has been seen as a tradition which is closely connected with the microcosm-macrocosm analogy.

### .. Microcosm as a Philosophical Concept

Various ideas in the background of Greek philosophical microcosmism have their roots in Presocratic philosophy, in the views presented by such thinkers as Anaximandros,

Heraclitus, Democritus and Pythagoras. Allers (: ) actually claims that in the texts of these Presocratics all the elements of later Greek microcosmic speculation are implied and “new elements were added only in the first centuries of the Christian era, with the influence of Oriental philosophies on the one hand, and the new conception of man, founded on the Christian doctrine, on the other”.

The first more extensive philosophical elaborations of microcosmism were produced by Plato. Being the first known thinker to broadly develop the analogy as a philosophical concept, he has been thought to have formed the basis for all microcosmic speculation after him (see, e.g., Barkan : ) and, as often happens

in the history of philosophy, it has been connected strictly to this one person and to one tradition. The most important dialogues from this perspective are *Timaeus*, *The Republic* and *Philebos*. Barkan (: ) distinguishes two basic suppositions behind Plato's microcosmism. The first one, appearing, for instance, in the cosmology of *Timaeus*, is the way of seeing cosmos as a living creature. This is probably the most popular form of the analogy and appears in various traditions. The second sees to the world as "a copy in the transitory world of 'becoming' of a divine original which exists in the world of 'being'". In addition to these forms, Plato develops the analogy in various formulations, for example as part of his epistemology.

If scholars approaching microcosmism from the mythological perspective are sometimes eager to reduce the whole idea to mythology, a similar problem can be recognized in philosophical studies on the topic. This has been noted, for instance, by Anders Olerud (: -). In his study on the analogy in Plato's *Timaeus*, Olerud criticizes previous research for thinking of Greek philosophical microcosmism, in particular that of Plato, as an independent tradition separate from the mythological one. According to him, the idea in Greek philosophy should not be examined as a separate tradition, but as a notion springing from, at least partly, the same sources as the "oriental" or mythological one. He also disapproves of the views presented by some scholars that Platonic microcosmism would be a similar but more sophisticated form of the idea than its mythological predecessors. As Olerud (: -) emphasizes, Platonic interpretations of the analogy were influenced, not only by Pre-Socratic philosophy and natural philosophy based upon it, but also by Orphism. According to him, the fusion of these two traditions is the particular characteristic of microcosmism in *Timaeus*.

In spite of his extensive interest in the idea, the term "microcosm" does not appear in Plato's dialogues. It is Aristotle who is considered to be the first philosopher opposing the microcosm with the macrocosm and employing the term microcosm in that context (Conger : xiv). For him, however, a metaphysical meaning for the analogy is not essential. Hence, there is a fundamental difference in the meaning given to microcosmism between the Platonic and Aristotelian traditions. It is these metaphysical and metaphorical interpretations which we will return to below (see ..).

According to Conger (: ), the Stoics use the analogy in quite a similar manner to Plato: they employ the argument, but the term microcosm is absent in their writings. In Stoicism, the analogy often appears in the realm of ethics, and virtue is linked with imitation of the surrounding world. The Stoics, however, shifted the reference and did not draw a parallel between man and the city-state, as was usually done in earlier microcosmic ethics, but contrasted man and larger

entities, such as the universe as a whole. (Jonas : ) Robert Durling (: –) presents some microcosmic topics in Seneca's *Naturales quaestiones* and finds there, for instance, analogies between the life cycle of man and the cosmic cycle and comparisons between the human body and the earth. Also the astrological aspect of the analogy is strongly present in Seneca's work.

Platonic microcosmism continues in Late Antiquity when it is taken to an essential position by many Neoplatonic thinkers. The analogy has sometimes even been considered a particularly Neoplatonic idea: Elmer O'Brien (: ) claims that the Neoplatonic system was the first system to be wholly compatible with it. Neoplatonic cosmology is based on the idea that reality as a whole is constituted of different hypostases, all of them emanating from the One and finally returns to its origin, the One. Man takes the final position in this hierarchical construction as the creature with the ability to ascend to the higher parts of reality. This kind of system surely forms congenial frames for the microcosmic human being – the last entity portraying the cyclic order of reality in its entirety. Some scholars have, however, indicated some difficulties in the microcosm-macrocosm analogy as part of the Neoplatonic system. Jacques Schlanger (: –), for instance, in his study on the thought of Shelomo ibn Gabirol, accuses Neoplatonists of incoherence regarding their microcosmism. According to Schlanger, the all-encompassing entity among the created would not produce problems in the Aristotelian eternal universe, but does when it is included into Neoplatonic emanationism:

Le microcosme, pour être le reflet ou l'image du macrocosme, tout entier dans sa linéarité ontologique, ne peut être rattaché à aucun point de la hiérarchie en particulier. [...] S'il n'y qu'une hiérarchie unique de l'être, l'homme-microcosme n'a pas sa place dans cette hiérarchie. Pour être l'image du tout, il ne peut en être une partie. (Schlanger : )

Allers (: ) also points out a difficulty in combining Neoplatonism and microcosmism. Even though the lower level of reality is generated from the higher and forms a reflection of it, there is an assumption in Neoplatonic emanationism that the lower is essentially different from the higher. Hence, man can be a symbol or an image of reality as a whole, but, as Allers remarks, it would be impossible for a man, as a being of the lower material world, to contain in him the higher spiritual hypostases. According to Allers, this fundamental problem has been solved by combining Neopythagorean ideas with Neoplatonism or by understanding the microcosmic position as a specific feature of man instead of that of an individual human being.

Despite accusations of incoherence, Neoplatonists have been among the most eager to develop the idea in the history of philosophy and roots for later elaborations have often been found in Neoplatonic sources. Marina Paola Banchetti-Robino (: ) argues that the “analogy, at least as found in later Western tradition has its roots in Neoplatonic philosophy”. Though the idea, in my opinion, cannot be reduced to purely Neoplatonic sources, Neoplatonism surely forms an important source for Islamic microcosmism. This is due to the sources Islamic philosophers employed. The Platonic tradition in its mediaeval Islamic interpretation is strongly influenced by its Neoplatonic interpretations. The transmission of the Platonic tradition to mediaeval Islamic thinkers is unclear and there is no evidence that Islamic philosophers were actually familiar with any original dialogues of Plato, or it seems likely that they were only known in the form of epitomes. *Timaeus*, for example, was, according to Walbridge (: –), probably transmitted to Islamic philosophers in Galen’s epitome, as a part of the larger corpus of epitomes of the dialogues. Plato was also known to Islamic philosophers through Aristotle, whose works were for the most part known in Arabic translations. Thus, Platonism in the Islamic tradition was dominated by interpretations made of it by Late Antiquity thinkers and Plato was mostly understood through Neoplatonism. Neoplatonism usually appears in the form of a combination of various philosophical and mystical traditions which was probably one of the things that enabled the inclusion of the microcosmic idea.

One intellectual tradition of Ancient Greece which has often been seen as closely related to microcosmism is the Hermetic tradition. The texts located under this obscure umbrella of ideologies and the overall definition of the Hermetic tradition as such are disputed questions. Usually works forming the basis for the Greek Hermetic tradition are dated between 100 and 300 AD. In the traditional view, the most characteristic feature of Hermetic philosophy is considered to be eclecticism: Greek popular philosophy, Platonism and Stoicism and, for example, Jewish and Persian influence can be recognized in texts included in the Hermetic Corpus. (Yates : –) Thought expressed in these works cannot be regarded as pure philosophy, but more as an ideology in between philosophy and religion. Hermetic literature has been traditionally divided into two branches: the philosophical branch and the technical branch, which includes different scientific texts treating astrology, alchemy and magic with references to the mystical figure of Hermes Trismegistus. The microcosmic idea appears in both of these branches.

A basic element in the works traditionally regarded as Hermetic philosophical texts is the view of reality as a many-layered whole in which correspondences between different levels prevail. The lower is seen as a sign of the higher, an idea



that culminates in Tabula Smaragdina, which is a text known in later Hermeticism through the Arabic Pseudo-Apollonian work Sirr al-khaliqa (Ebeling : ). In the frames of this kind of cosmology, man as a level which includes characteristics corresponding to other levels is seen as obvious. In Asclepius, man's uniqueness as a combination of the divine soul, which enables him to rise up to heaven, and the corporeal body, which ties him up to the material world, is emphasized throughout the work. Microcosmism connected with self-knowledge and with the idea of man as an image of God also appears in Asclepius:

The master of eternity is the first god, the world is second, mankind is third [...] on account of mankind's divine composition, it seems right to call him a well-ordered world, though Kosmos in Greek would be better. Mankind knows himself and knows the world: thus, it follows that he is mindful of what his role is and of what is useful to him; also, that he recognizes what interests he should serve, giving greatest thanks and praise to god and honouring his image but not ignoring that he, too, is the second image of god, who has two images, the world and mankind. (Copenhaver : –)

The analogy has an essential role in the scientific branch of the Greek Hermetic tradition as well. Astrology was an important discipline for the authors of these texts, and microcosmism has throughout its history been closely allied with it. These thinkers, for instance, assumed a correspondence between divine beings and heavenly bodies and deduced from this different theories of astrological medicine (Festugière : , –). Later, correspondence between man and the heavenly spheres formed an important part of the Islamic microcosm-macrocosm analogy. Even though the routes by which Hermetic works reached the Islamic world are difficult to define, .abians of .arran are considered to have been significant in the transmission of Greek Hermetic texts, particularly as regards their astrological branch (Green : –).

#### .. Judeo-Christian Tradition and Microcosmism

As Levy (: ) mentions, the microcosmic idea was not something as integral to Jewish and Christian doctrines as it was, for instance, to the Gnostic religious system. It confronted opposition in both Jewish and Christian circles and some important thinkers, like Maimonides (d. ), wrote against it. Some applied the analogy only as a metaphor, among them Thomas Aquinas (d. ). There are, however, representatives of the Judeo-Christian tradition who developed the microcosm-macrocosm analogy and adopted it as part of their religious philosophy. Some of their ideas originating in the biblical notion of man also influenced Islamic thought.

The first salient Jewish thinker who was interested in man as the microcosm was Philo (d. c. AD). Philo based his microcosmism on the idea of homo imago

dei. His interest was in creating a synthesis of Greek philosophy and Jewish thought avoiding all possible forms of anthropomorphism. Philo found two ways to do that, both connected with the idea of the human being as the summary of creation. According to the first, God is to the universe what man's soul is to his body, and the resemblance between man and God applies to the human soul, not to the bodily aspect of man. The second option suggests that God made man, not in his image, but after his image – Logos, the image of God, which is an intermediate level in the process of creation. Man is a copy of the antedated creation and a model of that which follows him. (Conger : –)

Some of the earliest Christian thinkers did not support the microcosm-macrocosm analogy. This was mostly due to the controversies with the Gnostics. However, when Christianity started to become established, microcosmism gained some space in the theology of the Church Fathers. It had a significant role in discussion on the bodily aspect of man and it formed an important tool against negative attitudes towards the human body, which were spread by Christian thinkers influenced by Neoplatonism and, in particular, by Origen (d. ). He saw the body as a worldly prison which draws man towards sin. Because microcosmism is based on the idea of man as a combination of the corporeal and the spiritual, and, for this, the body is considered to be a natural part of the whole, Origen's opponents used the analogy as justification for their views. (Conger : –) One of the early Church Fathers, especially fond of the idea of man being a miniature of creation, was Gregory of Nyssa (d. c. ). He uses it in his *On the Soul and the Resurrection* (Gregory of Nyssa: A–D), for instance, drawing an analogy between the soul and the divine: man as the microcosm can observe the existence of the soul contemplating himself and deduce from this the presence of the divine as a dominating power in the universe.

A salient mediaeval Christian figure elaborating microcosmism was Johannes Scotus Eriugena (d. ) and various traces of it can be found in his works. One worth mentioning has to do with the sympathetic relationship between the two images of God: man and the world, the microcosm and the macrocosm. Scotus Eriugena defines the human being as an intermediate level between God and the created universe. Man forms a link between the created world and the divine working as a turning point between *processio* (the creation or coming into being) and *reditus* (returning to God). Thus, the state of the union between God and creation, which is reached in salvation, is anticipated in the human being. (Otten : –) This kind of middle position of man is a regular feature in monotheistic interpretations of the Neoplatonic system. An interesting feature in Scotus's theory is his idea of the influence that microcosmic man has on the universe. Since man's good deeds and piety make it possible for the world to return to its origin, also the sin committed by man acquires cosmic proportions – the sympathy between

man and the created world causes man's sinful acts to influence the world as a whole. By committing a sin man damages his own role as *imago dei* and, unbalancing the equilibrium in himself, he unbalances the ontological harmony of the universe. (Otten : –)

Another mediaeval Christian developer of the analogy was Hildegard of Bingen (d. ), a sister of the Benedictine order, who worked as a healer, composer and artist. She wrote texts concerning, among other things, the natural sciences. She claims to have received personal revelation of all creation as macrocosm and microcosm, and this dominated her thought. Her notion of the Cosmic Christ, who made it possible for the human being to experience spiritual principles, is closely connected with microcosmism. Hildegard's views had great influence in her time and later during the Renaissance. (Tymieniecka : xii–xiii)

During the Middle Ages, Jewish philosophical theories concerning microcosmism resembled more the Islamic ones than those of Christian thinkers and often they actually formed a part of the same tradition. Many Jewish philosophers in Islamic areas developed the idea and were strongly influenced by Muslim thinkers. For instance, Shelomo ibn Gabirol (d. ) absorbed the analogy in its various forms characteristic to Neoplatonic cosmology. In addition to Neoplatonic microcosmism, he also uses the widespread explanation of the correspondence between the elements and bodily humours for the existing analogy between the human body and the material world. The instrumental value of microcosmism is acknowledged by Ibn Gabirol, and he considers microcosmic man to be a means to acquire knowledge of the surrounding reality through self-knowledge. (Schlanger : –)

The verse “And after my skin has been destroyed, yet in my flesh I will see God” (Job :) appears in the texts of many Jewish philosophers connecting the microcosm-macrocosm analogy with self-knowledge. Especially during the Middle Ages, the passage was understood to refer to the requirement of self-contemplation and to the idea that knowledge of God could be inferred from the created world. Later in Jewish microcosmic speculation this became a popular view and received various interpretations during the 11th and 12th centuries (Altmann : –). The question of self-knowledge and the microcosmic position of man also attracted Yosef ibn .addiq (d. ), who was among the most important mediaeval microcosmists. He even named his major work *The Book of the Microcosm* (*Sefer .Olam Qa.an*) and is, according to Mauro Zonta (), the first mediaeval Jewish thinker who has without doubt received direct influence from *Rasa.il Ikhwan a.-.afa.* in his microcosmic speculation.

Kabbalah forms its own significant tradition of microcosmism in Jewish thought. Most importantly, a central kabbalistic idea of Sefirot, the mystical attributes of God, is in many ways connected with the analogy. Sefirot are described as a tree which forms a kind of skeleton of the universe as a whole. Sefirot also find their place in the body parts of Adam Qadmon, the primordial man. (Scholem : –) The theory of Sefirot has been connected with microcosmism in some more marginal interpretations of the idea as well. In the later Kabbalistic tradition, the founder of the prophetic Kabbalah Abraham Abulafia (d. after ), for instance, develops it at the level of the intellect and identifies Sefirot with separate intellects that are all found in the Active Intellect. Prophecy is a mystical union between the human intellect and the Active Intellect, and, as a consequence of the union, man receives all ten Sefirot into his particular intellect. (Tirosh-Samuelson : –)

As we can see, important themes in both Jewish and Christian microcosmic traditions have been the homo imago dei theme and the emphasis on man in the centre of the created world. This was a familiar aspect of the analogy previously as well, but since the monotheistic theologians it had much greater impact in all microcosmic speculation. In the hands of mediaeval theologians, Jewish as well as Christian, the idea of man as the microcosm, according to Conger, “served as a convenient and uncritical method of reconciling religion with the natural sciences, which even then were beginning to raise questions and difficulties for the faithful” (Conger : ). After the Early Modern period, the scientific approach to reality became prevalent, and metaphysical as well as mystical perspectives were largely replaced by a scientific worldview. Concurrently, the microcosm-macrocosm analogy was driven to the margin in Western philosophical thought (Tymieniecka : xiv). In contemporary Western religious thought microcosmism has influenced, for instance, such spiritualistic movements as New Age religion (Hanegraaff : ).

## . PREVIOUS CLASSIFICATIONS

The microcosm-macrocosm analogy has been, to some extent, recognized as a theme worth of study by historians of philosophy. However, the trend of treating this subject seems to have ended about half a century ago. Thus, in order to trace the historical development of the analogy, one has to rely on slightly outdated studies. To my knowledge, there are only two monographs published on the general history of the idea in the history of philosophy. That of Adolf Meyer (), which was the pioneering work in the field, has been criticized by both Conger (: xv) and Allers (: ) for omissions and complete ignorance of some branches of the analogy. In , Conger himself published a monograph *Theories of Macrocosms and Microcosms in the History of Philosophy*. Conger’s work forms an overview of the history of the idea in the philosophy of the Atlantic and

Mediterranean regions. Conger emphasizes mediaeval and modern philosophy. Not surprisingly, since his intent is to sketch the general Western history of microcosmism, he has been criticized for superficiality (see, e.g., Olerud : –).

Allers () contributed to the study of the topic with an extensive article about the analogy in Western philosophy, which is particularly useful for its systematic approach: the classification it employs is enlightening and a valuable analytical tool for various kinds of materials. In addition to these general studies, there are several more specific studies on microcosmism of a particular philosopher or philosophical tradition.

In most systematic studies, the idea is analysed through a classification based on the form of the analogy or the meaning given to it. Anna-Teresa Tymieniecka (: x–xi) mentions three perspectives of microcosmism: mystical, which is attached to salvation; reflective or metaphysical, which could be understood as reasons for everything, “rational linkage of events, their causes and first principles”; and scientific microcosmism. These perspectives are said to “mutually influence and modulate each other”, and, according to Tymieniecka, among others Plato approaches the microcosm-macrocosm analogy from all these three perspectives. Nikolay Milkov (: –) distinguishes three traditions in microcosmic speculation which resemble the perspectives defined by Tymieniecka, adding some essential characteristics to them. The first one, also connected to mysticism, stresses the unity of all life, which is considered to be based on parallel proportions between different entities. This kind of microcosmism usually assumes the existence of the World Soul and is typical of esoteric philosophy like Hermeticism and occult sciences. The scientific approach is in Milkov’s view characterized by looking for similar orders prevailing at different layers of reality. In this category Milkov counts any part of a whole which represents or mirrors the whole. The third form accentuates the unity formed by different parts which follow certain principles.

In this chapter, I will focus in more detail on two classifications which I find most relevant in the context of this study, namely Barkan’s and Allers’s systematizations.

Barkan () examines the microcosm-macrocosm analogy as a corporeal metaphor in Renaissance poetry. He divides the study into three parts: the analogy between man and the cosmos from the perspective of natural philosophy; the idea connected to a commonwealth; and aesthetic interpretations. Allers (), on the other hand, employs a six-partite division: elementaristic; structural; holistic; symbolistic; psychological and metaphorical. I will introduce Allers’s and Barkan’s classifications under four categories. It needs to be emphasized that the classifications are rough divisions: what Allers (: ) maintains

regarding his systematic approach is that any form of the analogy rarely appears in a pure form – single interpretations mingle and overlap.

### .. Metaphysical and Metaphorical Microcosmisms

A basic distinction which seems to be behind most systematic divisions of microcosmism

has to do with the general meaning given to the analogy: is the idea thought to have some metaphysical meaning or is it used as a mere metaphor? This kind of distinction is, however, rarely explicit or even acknowledged, and some consider it impossible to strictly define the difference between metaphysical and metaphorical uses of the idea.

Allers (: –) defines the metaphorical microcosmism as a category on its own and refers to it as one of his six categories. The metaphorical analogy can, according to him, take different forms, but the combining feature of all these kinds of theories is that the analogy between the microcosm and the macrocosm is a mere figure of speech with no metaphysical significance. Referring to metaphorical and psychological analogies (excluding some forms of the latter to which I will return later, see ..), Allers (: ) notes that “these two interpretations may be opposed, as no longer genuinely microcosmistic, to those listed before [meaning elementaristic, structural, holistic and symbolistic] in which the notion of the microcosm retains its full value and metaphysical significance”. Hence, according to him, all other forms of his division approach microcosmism as a metaphysical fact except for metaphorical and some psychological analogies.

In the philosophy of Antiquity, the distinction between metaphysical and metaphorical microcosmisms seems to follow the line drawn between Platonic and Aristotelian philosophy. Mystically oriented Platonists are thought to more naturally assume the analogy to be a metaphysical parallelism. As Olerud (: ) declares concerning the analogies in *Timaeus*, they are not metaphors, but identifications.

Followers of Aristotle, instead, treat the analogy as a mere figure of speech. In the research of microcosmism in Western philosophy, Aristotle is often referred to as the father of the metaphorical branch. As Allers (: ) points out, “man, to him, is not simply a microcosm, but he is such a one only ‘somehow’.” Though Aristotle employs the term, and, for instance, the notion of the universe as a living organism, the analogy does not contain the same metaphysical meaning as it does in Plato’s texts (Allers : ).

Barkan does not draw a line between metaphysical and metaphorical microcosmisms, but he presents a distinction between their figurative and literal forms.

Barkan defines these two strands in the following way:

The figurative microcosm, which views man – rather than his body – as a précis of all creation and seeks in that perception a spiritual and intellectual truth, and the literal microcosm, which assumes an equivalence of man's body and the cosmos and uses this equivalence as some sort of scientific key to the nature of the world and man. (Barkan : )

According to Barkan (: ), figurative and literal occurrences of the analogy have varied according to their contexts. As a metaphor in literature microcosmism has occurred mostly in a joined form, including both figurative and literal aspects. In his opinion, however, natural philosophy has employed the analogy mostly in its purely figurative form.

As can be seen, Barkan's division is quite different from Allers's. Since the former's study concerns the use of the microcosm as a metaphor in literature, the metaphysical meaning given to the analogy is not relevant. Thus the distinction between figurative and literal analogies is about the concreteness of the analogy: the literal is about the human body and the figurative about the human soul. As for Allers, this kind of distinction cannot be found in his classification.

## .. Cosmological Approaches

Some presentations of cosmology describe the cosmos as a whole through man, or

– in fact more often – vice versa, man through cosmos. These kinds of analogies, in which the surrounding reality as a whole forms the macrocosm, can be referred to as cosmological microcosm-macrocosm analogies. The analogy forms a part of various kinds of cosmological systems, and Barkan (: ) divides cosmological microcosmism into four. The first one, chemical geocosm, approaches the world as a mixture of four elements. Astral geocosm, on the other hand, concentrates on the cosmos from the perspective of the heavenly cosmos which includes both physical and spiritual aspects. When the cosmos is approached as a numerical geocosm, mathematical relations are the main focus. Cosmologies that are primarily interested in the cosmos as a natural geocosm assume it to constitute the objects of this world as they are immediately perceived by the senses. According to Barkan, these aspects of the cosmological analogy often appear as combined. In most cases, all these four forms of the analogy seem to fall under the category of either elementaristic or structural microcosmism in Allers's classification.

Usually developers of the microcosmic idea assume that man is constituted of the same elements as the reality which surrounds him. Allers (: –) defines this view as elementaristic microcosmism. This theory places man in the middle position of the universe; man is the only being including the whole creation

and is “the bond between the material and the spiritual”. Man is often thought to include the four elements of which the cosmos is composed and these elements are not only included in the human being, they are also arranged in a manner similar to that of the cosmos. Man’s unique all-encompassing position can, according to Allers, be traced back to Aristotle’s theory of the three souls. As Allers declares, the elementaristic theory itself does not encourage the most elevated philosophical discussion. But more than anything, it is an analogy that defines man’s place in the cosmos. (Allers : –)

Structural microcosmism is a term that Allers employs to refer to man as a summary of the universal order. “If human nature is envisioned in such a manner, man is not simply subjected to the universal laws, because he is part of the universe, but he is himself, as it were, these laws, and he may become aware of them by looking into himself” (Allers : ). The structural microcosm-macrocosm analogy is divided into two branches. In cosmocentric structural microcosmism, the laws and harmonies of the cosmos are found – analogical or identical – in man. The parallel counterparts also influence each other, though the direction of the impact varies between interpretations of the theory. Man can be seen either as an active actor in the function and perfection of the universe or as a passive receiver of the influence from above – an idea that is closely related to astrology. Anthropocentric structural microcosmism concentrates on man and considers the cosmos as a large man, meganthropos. The notion of the World-Soul governing the material world can be included in this kind of analogy. (Allers : –)

## .. Sociological Parallelism

According to Barkan (: ), it is natural for a man to find unity amid all the diversity in himself: “the human body is the only, as well as the most obvious, way of understanding a unity of diversity.” Thus, it is also an innate feature of a man to define the human collective as something parallel to himself. Barkan divides the development of the sociological microcosm-macrocosm analogy into three phases. In the first phase the underlying idea becomes evident in the development of language. In many languages, there are various terms which refer to the human collective and its hierarchical structure and have their origin in the human body. In the second phase, the original idea of the correspondence is forgotten, even though it affects the fundamental structures of human thought. This phase, as well, is perceivable linguistically: “we are not likely, upon seeing the word members, to think immediately of arms and legs even though the human body is the source for both the ideas and the means of its expression.” In the third phase, the analogy is reborn and employed either to express or to prove the original organic theory. (Barkan : –)



In Allers's (: –) classification, the sociological aspect of microcosmism is considered an interpretation of holistic microcosmism. In the background of the holistic analogy, lies the tenet of man's way of creating order around him. This order is a replica of orders occurring in man and at different layers of reality and, thus, society is a representation of this order at one level. Allers emphasizes that in sociological holistic microcosmism society is presupposed to be a living organism, be this supposition merely an analogy or an actual assumption of the human community as a living person. In addition to sociological holistic microcosmism, Allers (: –) mentions as a variation of the holistic form aesthetic holistic microcosmism. Since it was not, according to him, developed during the period of his study, he does not define it in detail, but connects it with such maxims as "God as the great artist" and "to live one's life as a work of art".

The reflection of society is not necessarily found in any human individual and the microcosmic idea at the sociological level is sometimes connected with some excellent individuals. In the Christian tradition, the church as an institution has been thought to represent the body of Christ on earth. This has its origins in Paul's Epistles ( Cor. : –) (Barkan : –). At times the analogy is taken from that mystical level to the corporeal world: in some analogies the actual body of an individual person, for example, the body of the queen, has been described as the reflection of the society she leads, and "the eyes, hands, and mind, which earlier are made to represent groups within the commonwealth, are given human character and a total form in the person of the queen" (Barkan : ).

As Allers's terminology indicates, the microcosm-macrocosm analogy that seeks correspondences between man and the human society accentuates a holistic notion of society: each individual has his place and task as part of society, and there is no society without individuals. In addition to this, though the significance of even the weakest members of the Body of Christ is emphasized in Paul's epistle, the hierarchical structure of society and inequality between individuals is a theme that this kind of parallelism inevitably highlights: like in the human organism, some members are more vital than others. Thus, anthropomorphic representations of society have been employed for political purposes in defence of a hierarchical society, for example, in Renaissance England (Barkan : ).

## .. Microcosmic Theories and Knowledge

One may speak of 'symbolistic' microcosmism insofar as the microcosm is not conceived, either as obeying exactly the same laws as the macrocosm, or as duplicating and reproducing on a minor scale the latter's construction, but as 'corresponding to' or

being ‘symbolic of’ the universe, in its totality or some of its parts (Allers : ).

As an example of the symbolistic analogy Allers (: –) mentions Pythagorean thought, in which numbers are seen as lower level symbols or representations of the cosmic harmony. This kind of conception is most easily perceptible in the Pythagorean theory of music – in the idea that terrestrial music is a reflection of celestial music, sounds produced by the motions of the heavenly spheres. This is connected with microcosmism as well: “the fundamental identity of these two musics makes man a microcosm because the principle here and there is the same, namely the law of musical harmony.” Although the difference in the form of the analogy is not necessarily huge between the structural and symbolistic forms, the main difference between them is that the meaning given to the analogy is in the symbolistic form imperceptible: “things remain what they are, but they acquire, in the light of symbolistic interpretation, another, higher significance besides their natural one” (Allers : ).

Symbolistic theories are connected to knowledge, because, in order to understand their meanings, one needs to have special knowledge or, as Allers puts it, a “code”. There are, however, microcosm-macrocosm analogies which harness the microcosm purely to an epistemological concept. Allers (: –) defines as its own class the psychological microcosmism which assumes that man becomes the microcosm through acquisition of knowledge. This appears, for example, in Plato’s Meno (–), in which the process of learning is explained as recollection (anamnesis) of the objects of knowledge which man can, because of the immortality of the soul, find in himself. Man actualizes a microcosm in his mind when he achieves knowledge of the surrounding reality. Thus, the attainment of the microcosm at the level of the human intellect is something man aims to achieve. Barkan (: ) as well sees the requirement of man’s active participation for the attainment of the microcosmic state as a defining factor of this kind of microcosmism which he calls epistemological. In spite of its obvious emphasis on the spiritual aspect of man, Barkan surprisingly states that “the intersection of the ideas of man as microcosm and his body as microcosm is what we might call the epistemological microcosm”.

The psychological, or epistemological, microcosmism can, according to Allers (: ), be divided into metaphysical and metaphorical interpretations depending on the theory of knowledge. Following Platonic realism, the ideas of the objects – their true natures known by man – are drawn into the human mind. In this way, the psychological microcosm, which the acquired knowledge forms in the mind, is something metaphysical. On the other hand, when knowledge is not understood as something real drawn into the human mind, the psychological microcosmism

appears only in its metaphorical form. This distinction has to do with the realities of the universals, and, again, the distinction is drawn between the Platonic and Aristotelian views.

## . MICROCOSMISM IN THIS STUDY

Microcosmism is attached to the idea of man in Islamic tradition in various ways. As pointed out previously in this chapter, the main purposes of this study are, on the one hand, to examine the meaning and use of the microcosm-macrocosm analogy in the *Rasa'il* and related texts and, on the other, to scrutinize the position of the Ikhwan in the development of Islamic microcosmism. In this subsection, I will define the more precise aims of each chapter. I will first briefly introduce previous studies of the topic in the Islamic context. Then some general frames of microcosmism in this study will be clarified. Lastly, I will more specifically define the questions that I am posing for the corpus and outline the perspectives from which I will approach them.

### .. Previous Studies of the Islamic Microcosmic Idea

In general studies of the microcosmic idea, the contribution of Islamic thinkers in its development has been recognized in all of the important studies. Conger (: –) examines the ‘Mohammedan’ philosophy for some pages, concentrating mainly on the Ikhwan a.-.afa.. Allers (: ) also mentions the influence of the Ikhwan on later microcosmism, though seems to count the Islamic tradition as a part of the Eastern tradition which he excludes from his study. However, the research on Islamic philosophy still lacks a comparative and comprehensive study of the microcosmic idea in all its variety and different interpretations. There is neither a systematic examination of the origins of Islamic microcosmism nor of its development and multiplicity in the hands of Islamic philosophers.

The analogy has been acknowledged in studies on some particular Islamic thinkers and especially in the case of the Ikhwan a.-.afa.. Masataka Takeshita (: –) and Seyyed Hossein Nasr (: –) have dedicated chapters to it in their dissertations mainly in the philosophy of the *Rasa'il*. As representatives of the so-called *Philosophia Perennis* often do, Nasr finds microcosmism an important theme in Islamic philosophy and recurrently comments on it in Islamic cosmology and sciences. In addition to critical academic work, some of his writings on the topic are more speculative and related to his personal philosophical views. This provides a problem in some other studies on the history of the analogy as well, which is not unusual for topics related to present-day spirituality and mystically oriented philosophy.

Some articles concentrating on the microcosmic idea from some specific perspective have been published. Rémi Brague () has written an article comparing

some forms of Islamic microcosmism to its Greek predecessors. Widengren (: ) “trace[s] this speculation back to its origin and demonstrate[s] the way in which it presumably reached the Brethren, but also how it was living on in the Shi’ah movement” in his article “Macrocosmos-Microcosmos speculation in the Rasa.il Ikhwan as-Safa and some Hurufi texts”. He concentrates on the mythological roots of the microcosm-macrocosm analogy and related topics in Islamic thought and manages to show that some anthropological and cosmological views, such as microcosmism, “found their way into Hurufi circles thanks to the spread in the Shi.ah movement of the doctrines found in the Writings of the Pure Brethren” (Widengren : ). Microcosmism has also been of central interest, for example, in Alexander Altmann’s () examination of self-knowledge and Godefroid de Callataÿ’s (a), study on the mirror metaphor in the Rasa.il.

To my knowledge the only extensive study on Islamic microcosmism is the anthology of articles *Islamic Philosophy and Occidental Phenomenology on the Perennial Issue of Microcosm and Macrocosm* edited by Tymieniecka (). In this work, there are some general articles on the analogy and its Islamic forms, and some of its articles examine Islamic microcosmism and its relations to the Western elaborations of the analogy. The comparative study of Islamic and Western philosophy is fruitful up to a point, but it often reduces the topic to a purely philosophical question leaving out some essential aspects.

## .. Broad Definition

As we can see, the importance of the microcosmic idea in Islamic thought has been recognized in previous research. Some of its aspects have received attention while others have been completely ignored. One of the problems in the study of the topic is that the analogy often receives a narrow definition: many scholars explore it from a specific perspective excluding its other formulations. Often the examination has been restricted to the occurrence of the term .alam .aghir or to very explicit forms of the analogy. This has led to oversimplifications, as we can see, for instance, in Brague’s () and Widengren’s () treatments, which leave out some fundamental elements of the idea.

Milkov, who examines Lotze’s thought from the perspective of microcosmism, notes that the term microcosm appears in Lotze’s texts only a few times, although it is a fundamental feature of his philosophy. Concerning the reason for the absence of the term he supposes that “this was a measure taken against the danger that his work might be conceived in the old German tradition of microcosmic studies à la Paracelsus and Jacob Böhme” (Milkov : ). Milkov may be right, since in modern thought, the analogy surely has been a marginal idea pertaining to the branches of philosophy that some have considered suspicious. Its appearance with no connection to the term has, however, a much longer history

than the term “microcosm” and, at all times, microcosmism has been elaborated with no connection to the term. As noted earlier, the notion of man as the miniature of the surrounding order connected with the Greek term  $\mu\epsilon\tau\epsilon\omicron\sigma\mu\omicron\varsigma$  most probably appeared for the first time in Aristotle’s works, and philosophers before that, including Plato, employed the analogy with no reference to the term (Conger : xiv). In Islamic thought, the Greek term microcosm was replaced by the Arabic term *alam .aghir*. The term itself does not often occur in the texts of Islamic thinkers. However, different views based on the supposition of the analogy between man and the macrocosm appear quite frequently.

In this study, I propose a division of microcosmism into explicit and implicit forms. By explicit microcosmism I refer to two different ways of using the idea. The first is the most evident and the most easily recognizable form of the analogy, meaning the contexts in which it is connected with the Arabic translation of the term “microcosm”, *alam .aghir*. The second obvious form of the analogy is the comparison between man and the macrocosm which explicitly itemizes the correspondences between these two. Naturally comparing the microcosm with the macrocosm is an often occurring element of microcosmism, but I mean by this the contexts in which these corresponding features are clearly listed and the analogy between the two entities is in this way highlighted and made evident to the reader. I will be referring to this second form of the explicit microcosm-macrocosm analogy as explicit comparisons.

The microcosmic idea also appears in more obscure, less easily definable formulations. Then the analogy may, for instance, stand as a background assumption in a philosophical theory (e.g., Platonic epistemology) or a scientific worldview (e.g., astrology), and the author does not necessarily explicitly link it with microcosmism nor itemize the corresponding features between the microcosm and the macrocosm. These forms of the analogy will be referred to as implicit microcosmism. Although, at least to my knowledge, one cannot find this category in any previous classification, including these kinds of analogies in the examination of the topic forms a part of all previous systematic studies. For example, most of the examples presented by Allers would fall under this category.

I find this twofold division necessary, not only in analysing different forms of the idea, but also in restricting the corpus. In the texts, in which the analogy appears in its explicit form, it also often occurs in implicit variations. Implicit use of the idea does not, however, mean that it would necessarily appear in its explicit form. A criterion in choosing texts for the core corpus of this study is that in all of them the microcosm-macrocosm analogy also appears in its explicit form. Analysing the worldview of an author who refrains from any explicit microcosmic speculation

through microcosmism might appear to be artificial and contrived. On the other hand, in texts in which the analogy is explicitly present one should not expect the author to announce the idea at all occasions and the examination of the implicit forms of the analogy may reveal essential meanings given to the idea. Explicit and implicit forms of the analogy will not be examined separately, but side by side according to their significance as part of the idea of man.

As was noted in the subsection on the history of microcosmism, the narrow definition is also one of the deficiencies of studies of the analogy from a historical perspective. The historical origins of the Islamic microcosm-macrocosm analogy are not purely philosophical but are also mythological and religious. Hence, the broad definition used in this study also applies to the definition of the analogy when it comes to its historical background, and I aim to approach the topic from all these perspectives.

My primary interest is in microcosmism that can be regarded as metaphysical in contrast to the metaphorical analogy. This naturally requires interpretation from the reader, because the distinction between metaphorical and metaphysical analogies is not always evident. Although in the Islamic tradition the idea of man as a/the microcosm has been used as a mere figure of speech as well, in all of the texts I have chosen for this study the analogy also seems to stand as a metaphysical statement and part of the worldview of the author. Exclusion of the purely metaphorical use of the analogy has had an influence on the selection of the corpus: if I had given more weight to metaphorical microcosmism, the corpus would have consisted of more “mainstream” philosophical texts as well and, for instance, peripatetic philosophy would have been represented in it.

### .. Three Perspectives on Microcosmism

Especially Allers’s system of classification will work as an essential conceptual tool in this study. This helps in locating the Islamic tradition as part of the general history of microcosmism. In addition to that, it is beneficial in solving problems in restriction of the examination: it is not always easy to decide what to include under microcosmism and what not. Naturally Allers’s classification – like any other division – gives no definite answer to all problematic questions and it has some weaknesses from the perspective of the purposes of my study. There are some aspects which I find important, missing or having only a minor role in Allers’s division. For this, I propose a threefold division of the analogy especially suitable for my purposes and my material. This division will be made according to the way the microcosmic position of man is defined and includes, firstly, human-specific, secondly, physiological and, thirdly, normative aspects of the idea. The structure of this study will follow this division and the examination will be divided into three chapters. As is the case with the previously presented classifications, this

division does not aim at being exhaustive: themes relevant from one perspective appear in the context of another as well and the division of microcosmism into these categories is not unambiguous.

### ... Human-Specific Microcosmism

By human-specific microcosmism I refer to contexts in which man is thought to form the microcosm as a representative of his species – not individually, but specifically. This form of the analogy is in many ways connected with the cosmological position of the human being and the emphasis will be on the role of microcosmic man among the created: how does the analogy define his relation to other species and his position in the universe as a whole.

The specific approach is not mentioned separately in Allers's or Barkan's classifications, but it appears in some other contexts. Izutsu (: –), for instance, states that Ibn .Arabi considers man to be the all-encompassing being (al-kawn al-jami.) at the cosmic level, but does not consider an individual perfect man to be a microcosm. Allers (: n. ), on the other hand, introduces human-specific microcosmism as a possible solution for problems that the Neoplatonic system contains regarding the idea of man as the microcosm by stating that “it is also possible to combine Neo-Platonic with microcosmistic views by making not individual man, but man, or mankind, the microcosm”.

The third chapter of this study will consider microcosmism from this human-specific dimension. Firstly, the topic will be approached scrutinizing explicit comparisons between man and the universe. The notion of the world as a large man along with anthropomorphic features found in the universe as a whole is present in the texts of many Islamic philosophers. Because of the focus of this study, this indubitably important theme is approached only as it concerns the idea of man and his position in the universe. In addition to examining the relationship between the cosmological system and microcosmism, this subsection also works as an introduction to some cosmological views of the Ikhwan which will be relevant throughout the study.

Human-specific microcosmism does not only concern the cosmological position of the human being in general, but also the origins and the ideal state of man. The archetype of the human species is the second cosmological theme approached in the third chapter. As will be seen, this is an essential topic concerning the whole meaning given to the analogy in the Rasa.il and its origins can be traced back to earlier mythologies. Usually, in mythological forms of the idea, the first man also functions as a model for the creation of the universe. This kind of idea does not fit the Islamic context, but some philosophers, Suhrawardi in particular,

have revived elements of mythological traditions in their descriptions of the human archetype. This raises a question concerning the motivation for microcosmism: in mythologies man's role as the model in the creation formed an explanation for the correspondence between him and the surrounding reality. Did Islamic philosophers develop their own explanation for the correspondence between the microcosm and the macrocosm and, if so, what was it? I will examine this topic in the case of the Ikhwan throughout the study.

Concerning the human being in the cosmos, an important theme is the intermediate position of man. Man as the middle being will be examined from the perspective of the general twofold nature of man and, as part of an essential cosmological topic in many texts, namely metaphor of light. The idea of man as the middle being is connected with the idea of the human being bringing together the characteristics of animals, which will be treated in its own subsection. In this context, the attitude of the texts towards animals and man's role in the chain of being will also be examined.

Although these forms of the analogy are most easily definable as human-specific microcosmism, the topic will evidently appear in other chapters of the study as well. Thus, one of my aims in this study is to consider, whether this kind of category is possible to define and, if so, what is its relevance concerning the corpus in general.

### ... Physiological Microcosmism

A significant question when man is treated as the microcosm is what is meant by man: is man approached as a corporeal or a spiritual being or as a psychophysical whole he forms as the sum of them both? This topic is not separately notified in Allers's classification, which is due to the goal of his study: its aim is not to define the idea of man like in the present study, but to examine the microcosm-macrocosm analogy in general. Some studies, like that of Barkan, examine microcosmism

from the perspective of the human body, which, as noted above, Barkan refers to as literal microcosmism. In some studies, the primary attention is on the spiritual aspect of man – in Barkan's terms the figurative form of the analogy. Some others emphasize the whole man forms, or, simply, the "individual's life", as Barkan (: ) describes Plato's sociological comparisons.

In Islamic mediaeval thought, to treat the human body and the human soul as their own separate entities is not something natural, and the treatment of the corporeal and the spiritual aspects of man rarely appear detached from each other. Also when man is understood as the microcosm, the psychophysical holism is often emphasized. Nevertheless, I find it convenient to scrutinize the human body



as the microcosm separately, because there are various passages especially interesting in this respect. Instead of employing Barkan's above-mentioned terms, i.e. the "literal" microcosmism of the analogies examining the human body and "figurative" referring to the analogies concentrating on the human soul, I will instead refer to physiological and spiritual analogies. Although Barkan's aim in using these two terms was obviously different, in the context of this study "literal" and "figurative" might be confused with the categories of metaphysical and metaphorical microcosmisms.

Physiological microcosmism will be the focus of the fourth chapter. The main purpose will be to explore what the microcosm-macrocosm analogy in this form discloses concerning the concept of corporeality and, on the other hand, how the analogy is used in the description of human physiology.

The approach to man as a combination of the spiritual and the material is a pervasive theme in whole microcosmism and as an opening to this chapter I will consider the relationship between the body and the soul and the dichotomy between them in the human being. Neoplatonism has quite a negative attitude towards the material aspect of man. As will be seen, in spite of being strongly Neoplatonic, some texts that employ the physiological microcosm-macrocosm analogy, such as *Rasa'il Ikhwan a.-afa.*, have a surprisingly positive attitude towards the human body. I will examine, how the attitudes towards the human body are expressed through the analogy.

An important aspect of microcosmism in its physiological form, are the explicit comparisons between man and the surrounding reality. In these kinds of comparisons, the analogy takes its most explicit forms and, at times, the physiological parallelism is expressed merely by itemizing the corresponding features or structural similarities. These detailed listings can hardly be characterized as the most serious philosophical speculation: as will be seen, in many cases these comparisons were used for stylistic purposes in the texts. I will scrutinize the particular features of these comparisons and examine their use in the descriptions of the human being.

The meaning of physiological microcosmism appears more evidently in scientific theories built on the analogy. Apart from the *Ikhwan a.-afa.*, physiological comparisons are not widely employed, but as part of the scientific worldview the analogy appears more frequently. All the exemplary fields share the notion of the human body, or some aspect of it, as the microcosm. Through these scientific theories the technical aspect and practical value of the correspondence between man and the surrounding reality will be explored. It will also be seen that the scientific

meaning given to the analogy is found to be amalgamated with the spiritual one.

### ... Normative Microcosmism

In chapters three and four, the concentration will be on the human being as the microcosm: first specifically and then physiologically, both of them usually referring to any human being as the microcosm. Hence, in many of its forms presented above, the analogy between the microcosm and the macrocosm is considered to be an existing fact – an actual characteristic of the human being. In the fifth chapter, the idea will be examined as a possible feature of an individual man. The focus will be on the normative or potential aspect of microcosmism. Then the analogy is seen as something worth seeking and it concerns becoming a microcosm rather than being one.

Brague () examines microcosmism through the concept of imitation. For him, a basic form of the analogy in the philosophy of Antiquity is its use as an expression of an ideal – man should imitate the ideal order appearing in the macrocosm. Brague claims that in Islamic philosophy the term microcosm ceased to be connected with imitation. The microcosm-macrocosm analogy as an expression of an ideal continues to exist, for example, in the texts of al-Farabi, but the term .alam .aghir is not used by him. On the other hand, Brague claims that the Ikhwan a.-afa. do employ the term, but separate it from imitation. If microcosmism is understood in the extensive manner, as it is in this study, the imitation of the surrounding reality and becoming a microcosm are, however, an essential feature of most of the texts in this study, which I will indicate in the fifth chapter.

In this normative form, the focus is usually on spiritual microcosmism and the microcosmic position concerns the human soul or the intellect. For this, in the fifth chapter I will start with an examination of the meaning given to the spiritual in man: what does it consist of and how is it related to the microcosmic idea? I aim to explore this, scrutinizing the division of the human soul and its faculties and the ways these faculties are treated in explicit comparisons. After that, the analysis of the human faculties will continue with three examples: epistemological comparisons used especially by the Ikhwan a.-afa., al-Ghazali's analogies which concentrate on mastering the incentive faculties, and Suhrawardi's story of the development of a mystic.

In addition to explicit comparisons, epistemological views are in many ways implicitly connected with microcosmism. The story of the wise king appearing in the th epistle of Rasa.il Ikhwan a.-afa. will work as a starting point of this subsection and all three themes treated in it are somehow related to it. In this subsection, one of my aims is to find out what is the role of the analogy in epistemological theories of the texts. How is it employed in the descriptions of the process

of knowledge and how does it influence the Islamic theories of knowledge? If for the Ikhwan a.-.afa.

microcosmism is a tool to express the way to achieve epistemological perfection, many Sufis have employed it in their descriptions of the development of the human soul in a broader manner. As will be seen, in Sufi texts a third level is attached to the analogy, and the correspondence not only concerns the human being and the macrocosm but also God. The third level of the analogy is also present when microcosmism is examined in the context of human activities. Then the imitation of God becomes an essential aspect of the analogy.

In these three chapters I will analyse the theme employing the conceptual tools presented above and examine how my threefold framework coheres with Allers's classification. I will provide some conclusions in individual subsections during the study, but the concluding remarks of this work as a whole will be presented at the end of the study. Before going to the three themes of microcosmism I will first introduce the corpus of the study.

## . THE CORPUS

Rasa'il Ikhwan a.-.afa. will work as a starting point of this study. At the beginning of my doctoral studies, my intention was to provide a more general presentation of the microcosm-macrocosm analogy in the Islamic tradition from the ninth to the thirteenth centuries, and the Rasa'il was intended to be only one of the texts of the corpus. In the course of the study, the role of the Ikhwan in the development of the idea turned out to be more essential than I had expected and, for this, I decided to take their microcosmism as the focus of the whole investigation. Thus, I will concentrate on the ways the Ikhwan elaborate the analogy, and then extend the examination to the Islamic tradition more generally. My aim is not to provide an exhaustive study of the theme – that is not feasible in a single thesis. Instead, I propose some general frames for the development of the microcosmic idea in Islamic thought, evaluating its appearance in the Rasa'il and in certain other texts.

Another goal of this study is to examine the position of the Ikhwan in the Islamic tradition, namely the influences they received from earlier tradition and their impact on later texts – to the extent this is possible within the frame of my material. For this, in addition to the Rasa'il I focus on the texts which, on the one hand, employ the microcosm-macrocosm analogy and, on the other, are acknowledged to be somehow, directly or indirectly, related to the Rasa'il.

In this chapter, I offer a general overview of the texts in focus and illuminate how they are, according to previous studies, related to the Rasa'il. Before proceeding to individual thinkers, I will clarify an essential terminological matter connected to the corpus.

## . ON TERMINOLOGY: “ISLAMIC THOUGHT”

Two terms which define the whole corpus of this study are “Islamic” and “thought”. Should the tradition approached in this study, be called “Islamic”, “Arabic”, or by some other term, such as “Islamicate”? This kind of terminology always has its weaknesses, but I consider problems with the term “Islamic” less serious than those of the other options.

Disagreement between the terms “Arabic” and “Islamic” appears, for example, in the study of history of philosophy. It has been thought that, as Dimitri Gutas (: –) affirms:

Arabic was the language of Islamic civilization and the vehicle in which the identity and self-consciousness of that culture was cultivated and transmitted to all citizens in the Islamic world, regardless of their religion. [...] Even in the cases where some late philosophical works were written in Persian, the terminology was still completely Arabic

as was the way of thinking that underlay the expression.

Certainly, the position of Arabic language was strong in the mediaeval Islamic world, but the authors writing in Persian would probably disagree on Gutas’s idea of Arabic as their way of thinking. Many of the authors in the Islamic world did write, think and argue in Persian or other languages, and in some areas and periods these languages were in no way subordinate to Arabic. Regarding this study, although my corpus is constituted primarily of texts written in Arabic, some Persian texts are included as well. Suhrawardi seems like a good example of an author, who, even though he wrote in Arabic as well, cannot be regarded as an “Arabic thinker”.

Peter Adamson and Richard C. Taylor (: ) emphasize the historical perspective in the use of the term “Arabic philosophy”. They justify its use with reference to the fact that the tradition started with the translation of Greek philosophical texts into Arabic and later philosophers of the tradition were interested in “coming to grips with texts made available in the translation movement, rather than with putting forward a properly ‘Islamic’ philosophy”. Without undervaluing the importance of the translation movement, Arabic philosophy could be considered, as Oliver Leaman (: ) points out, to be only one, albeit important, strand of Islamic philosophy. I agree with Leaman in that “whatever is meant by Arabic philosophy cannot hope to be comprehensive enough to encompass the whole of Islamic philosophy”.

There are two main problems that have been indicated in the term “Islamic

philosophy”: firstly, that the use of the term implies ignorance of the non-Muslim philosophers in the Islamic world and, secondly, that it overemphasizes the ties between philosophy and religion.

In this study, I understand “Islamic” as a cultural restriction. In the present-day situation this would be more problematic, but in the political situation of the Middle Ages, at least until the thirteenth century (when all of the texts of the corpus of this study were completed), there was a region that could – despite its geographical, ethnical, linguistic and religious heterogeneity – be referred to as the “Islamic world”. This “Islamic world” consisted of the areas which were under the governance of different Muslim rulers. Hence, by “Islamic culture” I do not refer to any monolithic area or culture, but to an umbrella notion under which many local varieties existed.

Thus, although all of the texts that are discussed in this study were written by Muslims, this is not the reason why the term “Islamic thought” is used. There were other philosophers writing in the area of the Islamic world, who were, for example, Jewish or Christian. However, when the term “Islamic philosophy” is understood as it is in this study, their work, too, falls under the term “Islamic thought”.

There still remains the problem raised especially in the discussion on Orientalism which sees religion as a defining feature of the culture and in this way “religionizing” it and, in the case of this study, the scientific and philosophical tradition. This has been seen as a typical feature of the approach to “Eastern cultures” – even if “Christendom” has been used of mediaeval Europe, “European culture” is quite rarely referred to as “Christian culture”. So, why should this be the case with areas ruled by Muslims? It is also to be noted that even if the mediaeval intellectual tradition is in many ways more religious than modern philosophy, not all of the topics treated in it are religious and surely do not follow the principles set by religious scholars of their times. Not many of the views presented in the texts would receive the affirmation of an “average Muslim”. I admit these problems, but, however, defend the term “Islamic” given the lack of better candidates. Any geographical restriction does not really serve my purposes and I find such terms as Marshall Hodgson’s “Islamicate” artificial.

Lastly, one note concerning the term “thought”. Instead of using the word “philosophy”, I refer to the traditions treated in this study as “thought”. My intention is not to evaluate the philosophical value of the works or the argumentation skills of the authors, but to avoid problems faced in bringing together this collection of works which do not evidently fall into any one part of philosophy. The Ikhwan obviously were philosophers, but how should works attributed to Jabir ibn

.ayyan or al-Qazwini's .Aja.ib al-makhluqat be regarded? Neither the corpus nor the topic in focus here requires restriction to the field of philosophy. The concept of microcosm is not, as I define it, solely a philosophical notion, but also has, for instance, mythological aspects.

. RASA.IL IKHWAN A.-.AFA.

Despite more than a century and a half of academic research on Rasa.il Ikhwan a.-.afa.

wa khullan al-wafa. (Epistles of the Brethren of Purity and the Friends of Loyalty, in the following referred to as the Rasa.il), there is still no agreement either on its dating, on the identification of the authors, on the ideologies they represent or on the original form of the text. In the following pages, I will provide a brief overview of the most important arguments concerning these topics.

.. Dating of the Work

It is mentioned in the Rasa.il that the text was composed by the Ikhwan a.-.afa., the Brethren of Purity. The authors usually refer to themselves in the plural, but occasionally the singular is used. Abbas Hamdani (: ) explains this by pointing to the process of writing: the authors worked as a group with one responsible coordinator. Sometimes the whole myth of the brethren has been questioned. Samuel Miklos Stern (: –) claims that the obscure group described in the text does not even refer to the authors themselves. According to him, the mysterious Ikhwan are a portrayal of an ideal community rather than a description of an existing group. Yves Marquet (b: ), on the other hand, assumes that the term Ikhwan a.-.afa. alludes, in addition to the authors, to all the initiates of the doctrine versed in the Rasa.il.

Different estimates place the composition of the Rasa.il between the end of the ninth and the beginning of the th century. Marquet (a: ) belongs to the supporters of the late completion of the composition project. He mentions that there are notable differences between individual epistles and it seems likely that the writing process was accomplished over a long period of time: the compilation of the work seems to have been initiated as early as during the last decades of the ninth century and, according to Marquet, the Rasa.il had its final form possibly around the year , but not in any case later than . In some recent studies, the composition is considered to be an even longer process from the 's to the 's (Baffioni a: ).

Although there are scholars who date the work to as late as to the mid-th century (Casanova ), references to the work are, according to A. L. Tibawi (: –), so abundant in the last decades of the tenth century that it must have been completed by that time. Lately, however, evidence of the existence of

the Rasa.il's final form decades before Marquet's estimate has been obtained. As de Callataÿ (: ) summarizes, "Hoy en día se puede considerar que existe un consenso casi universal entre los expertos sobre los Ijwan al-Safa. en decir que los años – sólo marcan una especie de terminus ad quem de ese proceso de composición, y que su terminus post quem debe ser buscado mucho antes." His own study comparing magic in the Rasa.il with that in Rutbat al-.akim and Ghayat al-.akim supports the view previously presented by Maribel Fierro () that the latter texts were completed by the mid-tenth century, and because the Rasa.il was a source for these works, it must have circulated in its approximately final form in the Iberian Peninsula before that (de Callataÿ ).

Hamdani presents quite radical views on the topic. He considers the work a composition of a group of pre-Fa.imid Isma.ilis in a short period of time before the end of the first decade of the tenth century. He justifies his theory using both internal and external evidence. The former is connected with the religious convictions of the authors. Hamdani () indicates passages from the work which, according to him, affirm that the authors were Isma.ilis, whose intention was to establish a state following their ideals. From their criticism towards other Shi.i sects, Hamdani comes to the conclusion that they must have composed the work after the concealment of the last Twelver Imam in , but before the establishment of the Fa.imid state in . As for external evidence, Hamdani (: – ) argues that citations of the Rasa.il in other sources, such as in a work of the poet Ibn ar-Rumi (d. ), support the early dating of the work. He also claims to refute certain previous theories, which affirm the late dating of the work based on citations appearing in it, by indicating many of them to be later interpolations. He emphasizes that the printed editions used by most scholars are unreliable in this respect and there are huge differences between the manuscripts when it comes to quotations (see n. ). (Hamdani : –)

## .. Identification of the Authors

Regardless of the disagreement concerning the date of the Ikhwan, there seems to be a consensus that the Rasa.il was for the most part written in the city of Ba.ra (and, partly, according to some, e.g., el-Bizri : , in Baghdad). The precise identity of the authors has been discussed since the Middle Ages. Sometimes the work has been attributed to only one person, like in the fictional but widespread version of its history – supported, as Tibawi (: ) points out, by some Western scholars in the th century – in which the work is considered a composition of the enigmatic al-Majri.i known as the author of Ghayat al-.akim.

Friedrich Dieterici (: –) was the first to bring up the list of four names of authors connected with the Isma.ili movement given by Abu.ayyan atTaw.idi

(d. ) in his *al-Imta. wa.l-mu.anasa*: Abu Sulayman Mu.ammad ibn Ma.shar al-Busti (also known as al-Maqdisi), Abu.l-.asan .Ali ibn Harun azZanjani, Abu A.mad an-Nahrajuri and al-.Awfi. This assembly of sages is said to have worked during the 's in Ba.ra. Stern ( ) continued the discussion revealing another list from at-Taw.idi's contemporary .Abd al-Jabbar alHamadani. He mentions as authors of the *Rasa.il* three of the same names, replacing al-Maqdisi with Abu Mu.ammad ibn Abi.l-Baghl. He also indicates that they represented a marginal branch of Isma.ilism and their views concerning the order of the Brethren were more of a utopia than concrete political ideals. The authenticity of these listings is questioned by scholars dating the text to earlier decades.

The main discussion in Ikhwan research has concentrated on defining the relation of the authors with Isma.ilism – this was the major theme in research on the text for throughout the th century. As already noted, Hamdani ( ) and Stern ( ) consider the Isma.ilism of the Ikhwan to be a proven fact, albeit their views concerning the placement of the Ikhwan within the movement vary. Marquet has published a dissertation and dozens of articles on the thought of the Ikhwan which he interprets through Isma.ili concepts. According to him, “it seems indisputable that the Epistles represent the state of Isma.ili doctrine at the time of their composition” (Marquet b: ). The influence of the *Rasa.il* on later Isma.ili and especially .ayyibi circles is generally acknowledged, but many scholars argue against the Isma.ili origin of the work. Among the features conflicting with Isma.ili thought is, for example, its attitude towards the Imam (see, e.g., Tibawi : ). Some take a more cautious position in this discussion and de Callatay (b: xi) instructs the reader of the work to give up prejudices about its pure Isma.ili nature. According to him, “so restrictive a definition is in itself incompatible with the very eclecticism shown by the Brethren throughout their work.”

Another branch of thought into which the Ikhwan have attached to is Sufism. The mystical dimension of the text and the Ikhwan's impact on later Sufism is accentuated by Susanne Diwald (: –). Mariana Khoury-Samani (– ) also explores the relationship of the *Rasa.il* with Sufis and, although she does not claim that the authors were necessarily Sufis as such, she indicates some obvious Sufi features in, for instance, their vocabulary, views concerning the purification of the soul and attitudes towards ascetism. She also points out similarities between the views of the Ikhwan and the th century Nestorian Isaac of Nineveh, who is known for his Sufi-like views (Khoury-Samani –: –). Baffioni (a), on the other hand, rejects the link between the Ikhwan and mystics and considers their religious views to be very far from mystical or ascetic interpretations



of Islam. She also claims that the term “friends of God” (awliya' Allah), which often appears in the work, has nothing to do with the same term used by Sufis.

A very different view from all the other scholars is the one represented by Adel Awa (), who proposes that the Ikhwan were closely related to the Mu.tazila. This view is rejected among others by Marquet (b: ), who finds it contradictory with the apparent hostility the Ikhwan express towards the mutakallimun in general.

## .. Philosophy of the Ikhwan

On account of its form, the Rasa.il has been treated as an encyclopaedia. Geert Jan van Gelder (: ) notes that in the mediaeval Islamic world there were few encyclopaedias bringing together all fields of knowledge, the Rasa.il being among the best known and the most extensive ones. Because of this encyclopaedism and the style of the Rasa.il, some scholars have emphasized the popular nature of the work. El-Bizri (: –) points out that the philosophy of the Ikhwan and especially their microcosm-macrocosm analogy should be treated as “a populist assimilation of the Graeco-Arabic classical sciences within the tenth century urban folk-beliefs of the learned of Iraq”. According to him, “syncretism of Ikhwan al-Safa.

may have been a genuine expression of the diversity that characterized the variegated urban cultures of the Fertile Crescent of Syria.”

In spite of the encyclopaedic structure of the Rasa.il, the main purpose of the work seems to be transmission of an eclectic philosophy. The philosophical system forms a synthesis of, on the one hand, Neoplatonism, Aristotelianism and some philosophical traditions outside the mainstream of philosophy, such as Hermetic and Neopythagorean thought, and, on the other hand, religious – Christian and most importantly Islamic – traditions. Ian Richard Netton has laid emphasis on this strongly eclectic nature of the work. He describes the authors as “Wisdom Muslims” and stresses two important aspects amalgamated in the text: orthodox Islamic thought and Greek philosophy (Netton : –).

Most scholars admit the eclectic nature of the work but opinions concerning the sources of this eclecticism vary. Marquet () has found the .abians of .arran to be an important background influence for the Ikhwan. According to him (b: –), in the Rasa.il early Isma.ilism was amalgamated with .abian thought and it took a strongly Neoplatonic form. It is because of this, in his opinion, that there are traces of the influence of early Babylonian astrology attached to the Indian, Iranian and Greek astrological elements, the Hebrew Bible, the Hermetic tradition, the Pythagoreans, Aristotle, Plato and the Neoplatonists,

Ptolemy, Euclid and Nichomachus in the work. In Marquet's opinion, this unique kind of eclecticism is a key characteristic of the thought of the Ikhwan: "What seems most remarkable, however, is the synthesis that they achieved, in an original manner, for their metaphysics, adapting them to the dogmas of Islam, and modifying, where necessary, the information of their predecessors" ().

The way in which the Rasa.il brings together philosophical and religious sources has been admired by many. Carmela Baffioni (a: ) accentuates the consistency in which the Ikhwan bring together philosophy and religion: "Their reworking of the "foreign" heritage, which was also accurately reproduced in terms of philology, was anything but inconsistent. In the ninth and tenth centuries their opus represented the only way of supporting the notion of a dual source of knowledge, based on revelation and reason." In the sphere of Greek philosophy, Baffioni (a: ) estimates the Platonic influence to be scarce in the work, appearing especially in the context of theological knowledge, while Aristotelian and Stoic ideas dominate when the scientific side of knowledge is approached. Regarding Neoplatonism in the Rasa.il, Baffioni (a: ) says that "the Ikhwan's interpretation of Neoplatonism, merged with neopythagoreanism, can be taken as their own philosophy rather than merely an outside source or influence." Baffioni (a: ) also indicates similarities between the Neoplatonism of the Ikhwan and such Isma.ili authors as as-Sijistani and an-Nasafi. In the same context, she states that the philosophy of the Rasa.il was developed further by .amid ad-Din al-Kirmani.

## .. The Rasa.il and Microcosmism

The Rasa.il is divided into four parts, proceeding from concrete sciences towards abstract ones. The parts are again subdivided into epistles. The number of the epistles and their original arrangement are debated questions. There is a contradiction in the number of the epistles even in the work itself; various passages of the Rasa.il refer to epistles. The most important contemporary editions, however, divide the work into epistles. Especially the authenticity of the last epistle on magic has been under discussion and it has been suggested that it could be partly a later interpolation. In the text itself there are references to changes in the arrangement of the epistles at least as regards the eighth and ninth epistles and the last two epistles.

In addition to these epistles, there is the comprehensive epistle, ar-Risala al-jami.a, which forms its own independent work of approximately a quarter of the size of the Rasa.il and claims to conclude the work. More than that, however, it discusses the implicit meaning of the preceding epistles and it was "a work for separate distribution among a special élite" (Hamdani : ). Because of this rather esoteric nature of ar-Risala al-jami.a, on the one hand, and because of

the abundance of microcosmic material already in the epistles on the other, I have decided to exclude ar-Risala al-jami.a from my investigation and concentrate only on the epistles. This does not, however, mean that the microcosm-macrocosm analogy would not be highly relevant also in ar-Risala al-jami.a, and further study of the topic would be worthwhile.

In this study, I will mainly use Bu.rus al-Bustani's () edition and I will abbreviate it as "R". Some epistles have already been edited in the ongoing project of the Institute of Ismaili Studies. When I have had access to these new editions, I have abbreviated them in the following way: Wright's edition of the fifth epistle as "W", Baffioni's edition of the th–th epistles as "B", Goodman's and McGregor's edition of the nd epistle as "G" and de Callataÿ's and Halflants' edition of the first part of the nd epistle as "C".

I started the examination of Islamic microcosmism in my MA thesis (Maukola ), in which I studied the multiple aspects of the idea in the Rasa.il. As I found out in my study, it receives various formulations and is an essential feature of the whole philosophy of the Ikhwan. The importance of the idea in the work has been widely acknowledged and Alessandro Bausani (: ) mentions it as the filo rosso in the whole encyclopaedia. The position of the Ikhwan in the elaboration of microcosmism in the history of philosophy has also been acknowledged by many. According to Conger (: ):

In spite of its naïve and fantastic views, one may say that it is in the Encyclopaedia of the Brethren of Sincerity that the theory that man is a microcosm first becomes imposing.

It is no longer fragmentary, but fundamental; and it is no longer isolated, but linked up with a comprehensive and correlated world-system.

The Ikhwan dedicate two of the epistles to the treatment of the microcosm-macrocosm analogy, one in the second volume, which discusses the natural sciences, the th epistle On the Saying of the Wise That the Human Being is a Microcosm, and the other in the third part on psychology, the th epistle On the Saying of the Wise that the World is a Large Man. While in the latter the Ikhwan utilize the idea mainly for the purpose of describing the ontological structure of the world, in the th epistle the main concern is on man and his faculties. In these epistles, the correspondence appears at various levels at the same time: the author jumps from one theme to another in the middle of a subsection – from the elements of the human body to the astrological level or from heavens to the sub-lunar sphere. This is one of the reasons I find it necessary to approach the topic systematically and with an aim to define its different forms in the work. Apart from these two epistles, the analogy occurs frequently everywhere in the Rasa.il,

and it seems clear that for the Ikhwan the microcosmic idea is not restricted to the fields of the natural sciences and psychology, but also has a theological, as well as

– to some extent – a mathematical dimension.

In the table below I have gathered all the explicit and otherwise obvious appearances of microcosmism in each epistle. The first column “Term microcosm” refers to the appearances of the Arabic term .alam .aghir excluding the contexts in which it is used to refer to the th epistle. The second column presents the occurrences of explicit comparisons as defined in ... The third column indicates brief references to these kinds of comparisons, which do not take the form of long listings between the corresponding features. These may simply occur in mentions such as “the brain is in the human body like a king in his kingdom” without going into details of the analogy. Into these “references to comparisons” I have also included contexts which by means of a short analogy define the relationship between the human body and the human soul (like the saying that the body is to the soul what a ship is to the sailor). The fourth column brings together appearances of the idea of man as the middle being as defined in Chapter . By “Other reference” I mean the occurrences of the analogy which do not fall into any of the aforementioned classes, but express the analogy between man and the macrocosm clearly and without requiring interpretation, claiming, for instance, that man includes everything in the created world.

As will be seen later in this study, many implicit forms of the analogy are excluded from this table and it certainly does not intend to give a comprehensive picture of the use of microcosmism in the Rasa.il. For instance, astrological theory and many epistemological ideas are treated as forms of the analogy, but are not presented in the table. Nonetheless, as can be seen, even by indicating only these evident and indisputable occurrences of the analogy, it can be shown that microcosmism is a theme which is often employed by the Ikhwan and we can actually find only seventeen epistles with no reference to these forms of the analogy at all.

## . OTHER TEXTS

The primary attention of this study will be on the Rasa.il and my aim is to provide a systematic picture of the use of microcosmism particularly in the thought the Ikhwan express in their epistles. In order to define the specific features of their microcosm-macrocosm analogy on the one hand, and to examine their role in the general development of it in Islamic thought, on the other, I have chosen some other thinkers and works, whose contributions to the idea will be examined side by side with the Rasa.il. In the case of the other texts, however, my purpose is not to examine the topic in as comprehensive a manner as in the Rasa.il. Hence, I have included in the examination only some particular works or even parts or

chapters of works, which are relevant from the perspective of microcosmism. As pointed out (see ..), in all of these texts, the analogy appears in its explicit and metaphysical forms.

As was seen previously, the thought of the Ikhwan forms a synthesis of a wide range of earlier philosophical and religious thought. This eclecticism is characteristic also for their microcosmic speculation. I will study how Islamic thinkers combined different traditions in their microcosmism. I am interested in to what extent the analogy worked as a point of contact for different philosophical and religious traditions in the mediaeval Middle East. The Rasa.il is in various ways related to many different branches of Islamic thought, among the most often mentioned ones being Isma.ili thought, the Hermetic tradition and Sufism. In addition, on account of its form, the Rasa.il is obviously a part of the encyclopaedic tradition. I have included in the corpus texts pertaining to the Hermetic tradition, the history of science, Sufism and the encyclopaedic tradition.

This selection of texts is clearly not the only possible one and I have had to make some omissions. As mentioned previously, the Isma.ili connections of the Ikhwan have been an important topic in earlier research and, for this reason, the exclusion of this tradition from my examination requires a special note. As for the present study, I have laid emphasis on other intellectual branches related to the Rasa.il and, even if some of the authors included in the study (e.g., Tusi and the authors of the Jabirian texts) have been connected with Isma.ilism, I have not included in my corpus any of the texts pertaining to the core of Isma.ili thought. Extending the examination to the Isma.ili tradition more profoundly would certainly provide important additional aspects to the topic, but would require its own separate study. Another omission from this study, which would be relevant in tracing the influence of the Ikhwan in later microcosmism, consists of various mediaeval Jewish authors working in Islamic areas (see, e.g., Zonta ). This, however, would also require a separate study.

#### .. Sirr al-khaliqa

Kitab sirr al-khaliqa wa-.an.at a.-.abi.a (The Book of the Secret of the Creation and the Art of Nature, also known as Kitab fi l-.ilal (A Book on Reasons) in the following referred to as the Sirr) is a work with at least as obscure a history as that of the Rasa.il. The work is attributed to Apollonius of Tyana, usually referred to in Arabic as Balinus (or Balinas, some other forms are used as well, e.g., Ablus in Ghayat al-.akim), who is supposed to have lived during the first century AD. There are altogether eight Arabic works preserved in full or partly in quotations which are attributed to Apollonius of Tyana. Apollonius is one of the main figures in the Hermetic tradition and – although Apollonius's role as the author of the work is generally denied – Sirr al-khaliqa has been considered to be among

the Arabic Hermetic texts. Hermes is treated as an important authority in the work (e.g., SIRR: , VI .) and the worldview presented in it follows ideas which are often regarded as Hermetic. This kind of definition of the Hermetic tradition is not undisputed and, in current research, for instance, Kevin van Bladel does not include the text under his definition of Arabic Hermetica.

The real author of the SIRR is still unknown. Most scholars affirm that the work was written during the Islamic era and usually its compilation is dated somewhere between the seventh and the ninth centuries (see Weisser : –). Some remarkable findings concerning the SIRR were made by Paul Kraus (: ), who, for instance, says that the work was written at the beginning of the ninth century, during the reign of al-Ma'mun. He also indicates the huge influence of the SIRR on the Jabirian Corpus: there are various references to the SIRR in Jabirian texts and several works pertaining to the Jabirian Corpus are entitled “ala

) affirms, the idea is also present in later Isma'ili cosmology and appears, for instance, in al-Kirmani's system. I hope I will be able to extend my examination in that direction in my future studies.

ra'y Balinas”. (Kraus : –) The SIRR was first partly edited by Silvestre de Sacy and later by Julius Ruska. Ruska was also the first to treat the well-known alchemical Tabula Smaragdina as the final part of the SIRR. A critical edition of the whole work including the Tabula Smaragdina as well as the most extensive research has been carried out by Ursula Weisser. She also points out some possible influences of the SIRR on the Rasa'il, noting similarities, for instance, in their views concerning astrological embryology (Weisser : ).

Similar to the Greek tradition (see ..), microcosmism in the Islamic context has been connected with the Hermetic tradition. Marquet (: –) defines some explicit forms of the physiological microcosmic idea as a distinctively Hermetic feature of the thought in the Rasa'il. Whether the SIRR is defined as Hermetic or not, microcosmism is undoubtedly an essential feature of the work. The SIRR has been divided into six chapters, the Tabula Smaragdina as an independent work following them. The work is characterized as an “alchemical cosmology” and it proceeds from the general description of the universe and its creation to the different classes of beings which inhabit it. The third chapter is dedicated to minerals, the fourth to plants, the fifth to animals and the sixth to the human being. Microcosmic references appear in different parts of the work, but, because my main interest is in the idea of man, the last chapter of the SIRR will be in

focus in my study.

## .. The Jabirian Corpus

One aspect of microcosmism is its relationship with scientific tradition, especially alchemy and astrology. As an example of these scientific disciplines, I have chosen to study the Jabirian Corpus. Marquet (a) examines the relationship between the texts attributed to Jabir and the *Rasa'il* and notes that both were composed in approximately the same period and in the same geographical area. The language of the texts also joins the two together, although, as Marquet points out, the language is at times more elegant in the Jabirian texts. Marquet also considers that the religious views of the authors are similar. Later he goes even further than this to argue that there are some passages in the *Rasa'il* which might indicate that some of the authors participated in the writing of both of these works at least partly: in the *Rasa'il*, there are references to “epistles”, which do not form a part of the work – at least as we know it – but works entitled in a similar manner can be found in the Jabirian corpus (Marquet a: ). Another work of the corpus of this study, which is closely connected with Jabirian writings, is *Sirr al-khaliqa*. Kraus and Plessner (: ) mention that the influence of the .abians of .arran can be found in works attributed to Jabir, and they name the *Sirr* as the direct source of these views for the Jabirian author(s).

The history of the works included in the Jabirian Corpus is not easy to define. First of all, a question without definite answer is the identity of the author/s of the texts pertaining to the corpus. The earliest source for the details concerning the life and works of Jabir ibn .ayyan is Ibn an-Nadim’s *Fihrist*. Already here some legendary elements are attached to the person, and suspicions about the existence of such a person were raised as early as during the tenth century. Although some current scholars still maintain the belief in the historical character of Jabir ibn .ayyan (see, e.g., Haq : –), Kraus’s criticism of this traditional narrative is valid. According to him, the texts attributed to Jabir are composed by different authors. In support of this view, he mentions the large range of scientific disciplines treated in the works. Also the plenitude of the texts implies that they were not composed by one single author (Kraus and Plessner : ).

Another radical conclusion Kraus came to concerns the dating of the texts. Those scholars who consider Jabir to be a historical figure assume that he lived during the eighth century and, hence, date the texts to the very early stages of Islamic science. Ruska (: ) and later Kraus (: xlviii–lxv) managed to prove that many important texts pertaining to the corpus cannot have been written before the mid-ninth century, some of them only in the first half of the tenth. As proof of this Kraus mentions the gnostic system of the works, which he refers to as “gnostic syncretism”, reflecting ghulat views that only appeared at the end of

the ninth century and the religious terminology that can be traced back to Qarmatian Isma'ilism. The scientific terminology of the works, which is based on that of .unayn ibn Is.aq, also supports the late date of composition.

Kraus ( ) lists altogether , works in the Jabirian corpus. Some of them are long texts, but many consist of only a couple of pages. In addition to alchemy, the corpus touches upon various fields of science, among them medicine, astrology and magic. Because of this and the numerous references to ancient authors, Kraus and Plessner (: ) draw a parallel between the Jabirian Corpus and the Ikhwan: "No alchemical work of Islam reveals such vast knowledge of ancient literature or has such an encyclopaedic character as the writings of Djabir. In this they resemble Rasa'il Ikhwan al-afa., which, by the way, come from the same source."

From the Jabirian Corpus, I have chosen some texts which are relevant to the perspective of this study. I do not claim that microcosmic references would not appear in other Jabirian works as well – actually Kraus (: ) characterizes the parallelism between three worlds (macrocosm, microcosm, meaning the human being, and mesocosm, referring to the art of alchemy) as one of the favourite doctrines of the Jabirian authors. Some of the texts included in this study, such as Kitab ar-ra.ma (The Book of Mercy) pertain to the core of the Jabirian Corpus and are extensively studied. Kitab ar-ra.ma is referred to in many other Jabirian works and is considered to be an early text among them (Kraus : ). I will employ Berthelot's edition of the work. Of the three books of Kitab us.uqus al-uss (The Book of the Fundamental Element) edited by Holmyard, especially the first, Kitab us.uqus al-uss al-awwal, deals with microcosmism. It belongs to the CXII books, which treat practical alchemy and, according to Kraus, the three works named Kitab us.uqus al-uss placed at the beginning of the listings of this group form a basis for the other works following them (Kraus : -). In the CXII books the theory of balance is not an essential element, but the works which Kraus refers to as "the Books on Balance" are dedicated to its treatment (Kraus : ). Of them I will examine Kitab al-mizan a.-.aghir (The Little Book of Balance), which is edited by Kraus himself. Some of the texts, however, like Kitab al-.awalim (The Book of the Worlds), have not been edited. Although, for practical reasons, my main attention is on the edited texts, I will present some examples from it because of its huge and obvious relevance from the perspective of microcosmism. The history of this work and its position in the collection is uncertain (Kraus : ).

## .. Sufism

It is generally acknowledged that the microcosmic idea is extensively elaborated by Sufi thinkers. As noted above (see .), some scholars, especially Diwald, have



emphasized the close relationship between the Ikhwan and Sufism. Among individual notions whose elaborations in the *Rasa'il* have had impact on later Sufism she mentions the microcosm-macrocosm analogy (Diwald : ). Although the closeness of Sufi views to those of the Ikhwan in general is a debated matter, their influence in later Sufism seems undisputed. I will discuss Sufi elaborations of the analogy in the context of three essential Sufi thinkers. All of them employ it but, as will be seen, in different ways.

### ... Al-Ghazali

The influence of the *Rasa'il* on al-Ghazali's thought is generally accepted and was already under discussion in mediaeval sources. Ibn Sab'in (d. ) considered the Ikhwan to be an essential source for him (Tibawi : ). According to Awa (: –) “un des meilleurs témoignages de l'influence des Frères sur les Penseurs musulmans nous est donné dans la cas de Ghazzali.” De Callatay (b: ) describes the case of al-Ghazali as “typical of the level of hypocrisy an author may reach when it comes to acknowledgement of sources, for though he dismissed the work of the Brethren, he adopted a number of their views without acknowledgement.” As an example of this he mentions the classification of sciences.

### Abu

.amid Mu.ammad ibn Mu.ammad al-Ghazali (c. –) was born in .us, to where he also returned for the last years of his life. During his career, al-Ghazali worked in various intellectual centres in the heartlands of the Islamic world including the Ni.amiyya in Baghdad. After experiencing a spiritual crisis – the second of its kind in al-Ghazali's life – he left Baghdad in . After this, he spent eleven years leading the ascetic life of Sufi and stayed for some time in at least Damascus, Jerusalem and the Arabian Peninsula. For the last five years of his life, he returned to teaching first in Nishapur and, finally, in .us.

Al-Ghazali wrote on different fields of religious sciences. In this study, I am principally interested in his books on Sufism. Most of these works pertain to his later production. His most important work *I.ya*.

.ulum ad-din (Revival of the Religious

Sciences, from here on the *I.ya*.) was written during his period of asceticism.

The work consists of four parts, each having ten chapters or books. Especially interesting from the perspective of the microcosm-macrocosm analogy is

the st book .Aja.ib al-qalb (Marvels of the Heart). The *I.ya*. is a book on Islamic practice and clothes its Sufi message, as Buchmann (: xxvii) puts it: “in

long theological, philosophical, and juridical passages more palatable to the tastes of theologians, philosophers, and jurists than that of nonspecialists”. I have used

al-A.madi's () edition. If the *I.ya*. was aimed at readers outside of the Sufi

tradition, *Mishkat al-anwar* (The Niche of Lights, in the following referred to as the *Mishkat*), however, is more explicitly a Sufi work and in it the author addresses readers who are already within the Sufi tradition. The *Mishkat* is a treatise which is constructed as a commentary on the Light Verse of the Qur'an (Q. :), and in its three chapters some basic elements of the Sufi worldview, such as emanationist cosmology, are present. Microcosmism is present in the work, but it does not stand in as important a position as one might expect in comparison to other Sufi works. In addition to its importance as a Sufi work, the *Mishkat* is included in the corpus for its irrefutable influence on later Ishraqi thinkers, such as Suhrawardi (Walbridge : –). Buchman's ( ) edition of the *Mishkat* is used. In addition to these works, I will also give some individual examples from al-Ghazali's ethical work *Mizan al-amal*, his famous criticism on the views of philosophers *Tahafut al-falasifa* and Kimiya-yi sa'adat, his Persian abridgement of the *Iya*.

... Suhrawardi

Suhrawardi's thought is related to the *Rasa'il* in many particular contexts. Hermetic features in his thought have been seen to have influenced the Ikhwan: John Walbridge ( : ) mentions the *Rasa'il* as a probable source for the ideas of the Ismailian Ismailism in his oeuvre. On the other hand, in her examination of the metaphor of light in the *Rasa'il*, Baffioni (b) makes an interesting opening for the discussion on the Ikhwan's possible influence on Avicennian and – directly or indirectly – Suhrawardian light metaphorism.

Shihab ad-Din Abu al-Futu. Ya'ya ibn 'Abd al-Shahid as-Suhrawardi (c. –) was born in Suhraward in northwestern Iran. He studied and travelled in various places in Anatolia and Syria and spent the last eight years of his short life in Aleppo. A turning point in his life happened some time before his arrival to Aleppo, when, in his own words, Aristotle appeared to him in a dream and convinced him of the existence of Platonic forms. In philosophical views this meant placing the wisdom of the Ancients and some Sufis above peripatetic philosophy, and Walbridge ( : ) refers to this as a “conversion to Platonism”.

Suhrawardi

is often distinguished from other sages from the same village by his enemies with the name “al-Maqtul” (the Executed) and by his supporters with the name “ash-Shahid” (the Martyr). Although his destiny is obscure, according to most, he was ordered to be executed by Saladdin for his political activities or simply starved to death in the chaotic circumstances of his times.

Suhrawardi's writings, estimated to be around 100 items (Ziai : ), are divided by Walbridge ( : ) into four groups: 1) allegorical stories 2) writings of his youth, 3) peripatetic writings 4) *ikmat al-ishraq*. In addition to these,

Walbridge mentions a variety of other works, such as prayers.

Suhrawardi himself defines *.ikmat al-ishraq* (Philosophy of Illumination, in the following referred to as the *.ikma*) as his masterwork. It was completed in . The work is constituted of two parts, the first being more clearly peripatetic and the second concentrating on Ishraqi views. As will be seen, the microcosmic idea is only marginally relevant in the *.ikma*. However, I have included it in this study because of its huge importance in Suhrawardi's production. The edition used in this study is that of Walbridge and Ziai ().

Some of Suhrawardi's allegorical stories, which clearly belong to the Sufi tradition, are obviously relevant from the perspective of microcosmism. Of special interest in this study are *Fi .aqiqat al-.ishq* (On the Reality of Love, also known as *Ya mu.nis al-.ushshaq*, The Solace of Lovers) and *Avaz-i parr-i Jibra.il* (The Sound of Gabriel's Wing). Both are originally written in Persian. The exact date of composition of Suhrawardi's allegorical works is not known, but they are often considered to have been written during the early stages of his life. Possibly because of their early composition, Ishraqi views are not present in these stories.

They are addressed to novices rather than other philosophers, which might be a reason for them being written in Persian and, as Walbridge points out, this might also be why the more elaborated philosophical ideas are omitted from them.

(Walbridge : –) In the case of allegorical stories, I have used W. M. Thackston's edition, which is based mostly on the edition of Seyyed Hossein Nasr.

An interesting work from the perspective of this study is *Hayakil an-nur* (Temples of Light). It is a rather obscure work and there is no certainty whether it was originally written in Arabic or in Persian. Walbridge (: ) characterizes it as a "popular Peripatetic work" which Suhrawardi composed for a general audience and it does not contain his characteristic provocative views. Walbridge (: ) dates this work to his youth and mentions that there were at least seven commentaries written on it. In this study, I refer to Owjabi's Arabic edition. Interestingly, however, in Shaykh Tosun Bayrak al-Jerrahi al-Halveti's English translation of the work there are some passages which are especially relevant for the microcosm-macrocosm analogy. Al-Halveti bases his translation on three Turkish translations of the work: Ismail Ankaravi's translation from the seventeenth century, Yusuf Ziya's from , and Saffet Yetkin's from (al-Halveti : ). I have had no access to these translations, but I will refer to the passages missing from the Arabic edition in footnotes, because they may indicate

some interesting additions/omissions of the passages concerning microcosmism, which could be considered in a more detailed study of this particular work.

... Ibn Arabi

The microcosmic idea is prominent in the works of Ibn .Arabi and it would not be an exaggeration to say that in them Islamic microcosmism took one of its most elaborate forms. Mu.yi ad-Din Mu.ammad ibn .Ali ibn al-.Arabi (–) was born in Murcia. He spent many years travelling around the Islamic world, first on the Iberian Peninsula and in North Africa and later he continued further to the east. Around the year he settled down in Damascus, where he spent the rest of his life. Estimates of his works vary from Brockelmann's (Ates : ) to Osman Yahia's ( ) works, treatises and collections of poetry. It is not only the number of works which is amazing in Ibn .Arabi's case, but also the fact that his magnum opus al-Futu.at al-makkiyya is a huge work and consisting of chapters.

From the wide corpus of writings composed by Ibn .Arabi, I have included in my study only at-Tadbirat al-ilahiyya fi i.la. al-mamlakat al-insaniyya (Divine Governance of the Human Kingdom, in the following referred to as the Tadbirat). The Tadbirat is a work which declares the way "the human kingdom" should be ruled and transmits an ethical ideal according to which a mystic should live. The work is divided into chapters, and I have used H.S. Nyberg's edition. Nyberg (: –) mentions the Ikhwan as a source of microcosmic ideas in the Tadbirat.

.. .Aja.ib al-makhluqat

An obvious feature of the Rasa.il is its encyclopaedic nature. Because of this, it is useful to include a representative of this kind of literature in this study. AlQazwini's .Aja.ib al-makhluqat has been chosen for several reasons. Possible influences of the Ikhwan on their later colleague al-Qazwini have been indicated in some particular topics, like astrological embryology (Widengren : ), and have been considered at a more general level by Syrinx von Hees ( ). Most importantly, in al-Qazwini's writings we can find some microcosmic passages and features which are surprisingly similar to those which appear in the Rasa.il.

There is very little certainty about the life of the author of .Aja.ib almakhluqat wa ghara.ib al-mawjudat (Marvels of Creation and Rarities of Existing Things, in the following referred to as the .Aja.ib). Abu Ya.ya Zakariyya ibn

Mu.ammad ibn Ma.mud al-Qazwini was born to an Arab family in the city of Qazwin in . In his own writings, he describes his travels around the Islamic world, but it seems probable that he did not visit all the places he reports that he visited. He worked as a qa.i in various parts of the Islamic world, at least in Wasi. and .illa, and, according to some, also stayed for some time in Damascus, where he met Ibn .Arabi. He spent the last years of his life in Baghdad working under the patronage of the well-known historian al-Juwayni (d. ), who from on worked as the governor of Baghdad, lower Mesopotamia and Khuzistan. It seems likely that al-Qazwini also died in Baghdad around .

Al-Qazwini produced two works which have sometimes been considered parts of a single encyclopaedia. The geographical work *Athar al-bilad wa akhbar al .ibad* (also known as *.Aja.ib al-buldan*) is constructed according to the seven climatic zones and in it al-Qazwini describes in alphabetical order the cities, mountains, rivers and other geographical attractions of the world. Al-Qazwini's other work *.Aja.ib al-makhluqat* is discussed in this study. The *.Aja.ib* is thought to have started a whole new tradition of cosmographical works in the Islamic world and, even if it was not the first of its kind, its systematic nature made it hugely popular for centuries. Translations of the *.Aja.ib* were produced from very early on, for example, in Persian, Turkish and Mongolian.

The *.Aja.ib* describes the whole created universe. The work is divided into two parts, the first treating the celestial, higher reality, *.ulwiyyat*, and the second concentrating on the terrestrial, lower *sufliyyat*. The first part starts with a description of the mechanics of the spheres and their influence on the sublunar world and continues by describing each of the planets, fixed stars and zodiacal signs, and the inhabitants of the higher realm: angels and jinns. Before going into details concerning the terrestrial world, al-Qazwini describes different calendar systems. The second part commences from the elements, continues with climes, different geographical formations and finally moves on to the *makhluqat*, the creatures of the sublunar sphere: minerals, plants, animals and man. Lastly, al-Qazwini provides a description of the ghosts, demons and other oddities in the terrestrial world. I will be concentrating on the chapter on man.

Both of al-Qazwini's works still lack a critical edition. I will be referring to the rather old edition of Wüstenfeld (). Considering the same passages in a more recent edition of the work (), I have noted some interesting differences, which I will elaborate on in the footnotes.

.. Additional Texts

Outside the actual corpus, some examples will also be taken mainly from two further works, *Ghayat al-akim* and *Raw.a-yi taslim*. *Ghayat al-akim* (The Aim of the Sage, from here on referred to as the *Ghaya*) is one of the most remarkable works on celestial magic in the Islamic tradition. It has an obscure history and there is no consensus about its author. The work has traditionally been attributed to the mathematician Maslama al-Majri (d. between —), but, among others David Pingree (: ) refutes the attribution claiming that it was composed on the Iberian Peninsula about half a century after al-Majri's death. More recent studies, however, date the work to a much earlier period. Maribel Fierro () convincingly argues that it was composed during the first half of the tenth century by the mu.addith and magician Abu l-Qasim Maslama ibn Qasim alQur.ubi (d. ). There are some passages which are indubitably influenced by the *Rasa.il* and the discussion concerning the dating of the *Ghaya* is bound together with that of the *Rasa.il*. Fierro (: —) argues for an early composition of the *Rasa.il*, stating that Maslama ibn Qasim became acquainted with the work during his stay in Ba.ra before the year . Pingree (: —) mentions the *Rasa.il* along with some Jabirian texts and the *Sirr* as sources for the *Ghaya*.

A multitalented scholar Na.ir ad-Din .usi (d. ) is best known for his astronomical innovations. He spent almost three decades among Nizaris, and it was during this period, around the year , that he completed *Raw.a-yi taslim* (Paradise of Submission, from here on referred to as the *Raw.a*) also known as *Ta.awwurat*. The *Raw.a* forms a unique kind of compendium of mediaeval Nizari Isma.ili thought and it has even been considered the major Nizari text from the whole Alamut period (Daftary : ). Hermann Landolt (: ) mentions that there are similarities in the cosmological views presented in the *Rasa.il* and the *Raw.a*.

## . THE MICROCOSMIC IDEA AND THE HUMAN SPECIES

Know that, when the ancient wise considered this material world (*al-.alam al-jismani*) with their eyes, witnessed the outward signs of the things with their senses, contemplated these situations with their intellects, studied the behaviour of all the individuals with their eyes and considered species of the individuals with their reflection, they found none, out of all of them, more complete in its structure and more perfect in its form or as a whole more strongly resembling this material world than the human being. (R II: —)

By human-specific microcosmism I mean the occurrences of the analogy in which the microcosmic position is described as an innate feature pertaining to the human species. The passage above is from the very beginning of the *Rasa.il*'s epistle On the Saying of the Wise that the Human Being is a Microcosm and it claims two

things. First, that it is the human being, among all beings, which is the microcosm. This is affirmed by the authors in the next subsection of the epistle, in which they say that “It is the human being only who is a sum total (jumla majmu.a) of the combined substances” (R II: ). Secondly, since the “ancient wise” are said to have needed both to consider physical reality and to contemplate the intellectual in order to find out the microcosmic nature of man, this is clearly a feature connected both to the human body and the human soul. The former will be in focus in this chapter: why is the role of the microcosm reserved specifically for the human species and what does it tell about its place in creation? These are questions primarily related to cosmology. For this, the relevance of the microcosmic idea in the context of the most important cosmological concepts will be evaluated. When microcosmism is considered a specific feature of the human being, man is often approached as the middle being, the combination of different aspects of reality. Hence, in this chapter, the material and spiritual aspects of the human being are mostly treated together.

This chapter will be divided into four parts, each of them examining the human being in the cosmos from different perspectives. Firstly, I will consider the position of microcosmic man in the cosmological system. The concentration will, on the one hand, be on the universe as a whole as the macrocosm and, on the other, on the features of the cosmological system which work well alongside the microcosm-macrocosm analogy. Secondly, I will move on to the cosmological archetype of the human being and the ways it is connected with the microcosmic idea. Thirdly, the intermediate position of the human being in the universe will be examined with special emphasis on the twofold nature of man. Fourthly, I will scrutinize the topic of the human being dwelling on the earth and examine the manner in which the microcosmic position defines his place among sublunar beings.

## . ANTHROPOMORPHIC COSMOLOGY

The human-specific microcosmism is closely connected to broader ontological concepts and the microcosm-macrocosm analogy has various different functions in descriptions of cosmological systems. The analogy between man and the universe is quite often used in order to clarify the basic principles of cosmology, mostly by comparing the psychophysical constitution of man with that of the universe. Especially in the *Rasa.il*, this is developed more extensively, which may be due to the cosmological system being easily applicable to this kind of parallelism.

### .. The Universe as an Animated Being

The cosmological use of microcosmism – unlike most of the metaphysically significant aspects of the analogy – also aroused interest among peripatetic thinkers. Sometimes it is even regarded as a typical feature of mediaeval peripatetic philosophy. In the th discussion of *Tahafut al-falasifa* entitled *On their inability to set*

a proof (to show) that heaven is an animal that obeys God, the Exalted, through its circular motion, al-Ghazali introduces the following view:

They [philosophers] had said: Heaven is an animal, and it has a soul whose relation to the body of heaven is similar to the relation of our souls to our bodies. Just as our bodies move voluntarily towards their goals through (their being) moved by the soul, the same (is the case) with the heavens; and the purpose of the heavens in their essential motion is to worship the Lord of the worlds, in a manner we will be mentioning.  
(alGhazali  
(e): , trans. Marmura)

A common aspect of the microcosm-macrocosm analogy in the context of cosmology which appears in this passage is its way of examining the macrocosm – in this case the heavenly spheres, but at times the sublunar world or the whole universe – as a unified entity and its manner of paralleling it with an animal, or sometimes with a city or a human being. Al-Ghazali evidently uses this analogy more as a means of describing the macrocosm in terms of the microcosm than the other way around. This is evidently a variation of Allers’s structural microcosmism and, more specifically, its anthropocentric variant, which is defined to describe the macrocosm through the human being. In this comparison, we can also find features of elementaristic microcosmism: the body and the soul appearing in the heavens can also be found in man.

An important characteristic of this kind of microcosm-macrocosm analogy is that the microcosm is not necessarily the human being, but, as al-Ghazali describes, any animated being (.ayawan). Similar overall references to the microcosmic idea occur in the Rasa.il as well, and sometimes the Ikhwan refer to the analogy simply in order to emphasize the constitution of the universe as a unified entity. For instance, in the epistle on astronomy (R I: ), they mention that “the world is one like a city is one, or like an animal is one”. In the description of the essence of Nature in the th epistle (R II: ), Nature is said to be like an animal, whose parts are like the members of an animal.

The Ikhwan, however, elaborate this type of analogy further, and especially the th epistle is – as its heading On the Saying of the Wise that the World is a Large Man indicates – about the universe as a “large man” (or meganthropus) (insan kabir). The basic idea of this view is summarized at the beginning of the epistle:

Know that, regarding the saying of the wise that the world is a large man and their saying that the human being is a small world, we must make a clarification in order for



you to understand its real meaning: its meaning is that the world has a body (jism) and a soul (nafs), by which they mean the surrounding sphere and the other beings consisting of substances and accidents it comprises. (R III: )

This topic recurs elsewhere in the Rasa'il: in the 11th epistle, the Ikhwan explicitly define the "world" (al-'alam) to mean the universe as a whole:

Know, oh brother, what the wise have said: by the world are meant the seven heavens and the earths and all creatures in between them; they also call it the large man. This is due to the fact that it is one body in which are combined the spheres, different layers of the heavens, the four elements (arkan ummahatihi) and the creatures of the World of Generation and Corruption. They also think that it has one soul, the faculties of which flow in all parts of the body, like the human soul flows in all parts of the body of one human being. (R II: –)

In addition to being a unified sum of its parts and including the spiritual and the material aspects, both man and the universe are constituted of the four elements

cosmocentric structural microcosmism, while in its elementaristic form the analogy is about

the elements simply appearing at both levels. In some comparisons, we will find references

to the corresponding faculties acting in the microcosm and the macrocosm, and for this they

could be defined as cosmocentric structural microcosmism as well.

– an aspect of the elementaristic microcosm-macrocosm analogy in its more developed form (Allers : ).

Like in the widely-spread forms of the analogy, for the Ikhwan as well, the twofold nature of the universe is often presented as an explanation for the analogy. In the 12th epistle (R III: ) it is said that: "In the construction of the human being are combined all meanings of beings, both simple and compound, as we have mentioned, because the human being is a combination of the thick, material body and the simple, spiritual soul. For this, the wise call the human being a microcosm and the world a large man." The Ikhwan, however, examine the resemblance between the microcosm and the macrocosm and the cosmological idea of the Universal Soul dominating the physical parts of reality in more detail, and they also attach this to the theory of emanation:

The world's body (jism) with all its parts – simple, combined and muwalladat – follows the ways of the body of a human being or an animal with all its body parts of varying

forms and different shapes. Its soul with all its faculties that flow in the parts of its body, moving and ruling the types of beings, their species and their individuals, is like the soul of a human being or any animal, flowing in all its body parts and joints of its body, moving and ruling all members and senses of its body. (R III: –)

Again, the Ikhwan often follow the analogy also used by peripatetic thinkers, and being a microcosm is not restricted to the human beings exclusively, but concerns other .ayawan as well. Later in the same epistle, they extend the analogy and affirm that analogical structures are found elsewhere as well: in a tree and in a forge of the craftsman (R III: –, see ..).

In the Jabirian Corpus, the division of the universe into the “larger” and the “smaller” worlds is presented as an even more complex system:

The world is two worlds, a larger (akbar) and a smaller (a.ghar). The larger is the higher body and the spiritual substances above manifest their activities in it. The smaller is the world below the higher body until the Earth. It is also said that the smaller is the human being; the smaller is called (a world) according to the larger, because it is quite like it. (Kitab ar-ra.ma: )

Hermetic, represented also by the Ikhwan, the world forms a unified entity and ether, despite its immutability, also possesses the four natures, which gives it a similarity with the sublunar world required in the astrological theory. For a description of ether in the Rasa.il, see R II: –.

In this passage, the manifold correspondence which recurs at different layers of reality is explicitly present: the Larger World refers to the universe as a whole – or to the heavens – and the smaller either to the sublunar world or to the human being. The parallelism between the Larger World and the human being is not explained any further, the smaller is simply said to be “like the larger”. The spiritual substances managing the material – a reference to the World Soul – are, however, present.

Besides these more general descriptions of the universe as a whole, some particular aspects of the world order are examined in the light of the microcosmic idea in the Rasa.il. As an illustration, resurrection as separation of the material from the spiritual is often linked with the idea of the world as a large man. In the th epistle (R II: ), the end of the world and the separation of all the bodies from the Universal Soul – the great resurrection (al-qiyama al-kubra) – is explained

to be like the death of any individual animal, which likewise is the separation of the body from the soul.

### .. Emanation and the Microcosmic Idea

In addition to the explicit references to the microcosm-macrocosm analogy, Allers (: ) includes in anthropocentric structural microcosmism the use of the notion of the World Soul, since it presumes that both the human being and the universe are psychophysical entities, substantially divided into two. The World Soul forms a part of most of the mediaeval cosmological systems. Nevertheless, the microcosm-macrocosm analogy is in its more extensive cosmological form especially suitable for systems like that of the Rasa'il.

The microcosm-macrocosm analogy is a fundamental feature of Neoplatonic cosmology – a tradition which greatly influences most of the texts of the corpus. Also the cosmology of the Ikhwan is usually regarded as an interpretation of Neoplatonic

emanationism. The Ikhwan add to the system of Plotinus six more levels.

The emanation proceeds from its origin, the Creator (al-Bari), first to the Universal Intellect (al-.aql al-kulli), then to the Universal Soul (an-nafs al-kulliyya). After that, it emanates to the Prime Matter (al-hayula al-ula), Nature (a.-.abi.a), the Absolute Body (al-jism al-mu.laq), the spheres (al-aflak), the four elements (al arkan) and, finally, to the beings of the sublunar world (al-muwalladat). (See, e.g., R III: –)

Often the cosmological system and the role of the human being as a unity after diversity have been clarified through numerology. In the first epistle (I: ), the Ikhwan discuss numbers as roots for everything. Numbers and their cosmological meanings are examined in detail again in the 2nd epistle On the Opinion of the Pythagoreans regarding the Origin of the Intellectual Beings and in the epistle following that, On the Opinion of Ikhwan a.-.afa' regarding the Intellectual Origin, and the topic recurs in the epistle on the human being as a microcosm (R

II: –). In the context of mathematics (R I: –), it is told that because all numbers are compositions of 1, 2, and 3, the first four numbers stand as the basis for the whole creation. Later in the Rasa'il, the Ikhwan continuously examine numbers through emanationistic cosmology and they are related to the first entities, one to the Creator (al-Bari), two to the Universal Intellect, three to the Universal Soul and four to Nature and so on, until the last level of the emanation muwalladat or mukawwanat, which is related to the number nine. Minerals, on the other hand, are said to stand for tens, plants for hundreds, animals for thousands and the mixture (al-mizaj), which could most likely be understood as the human being, again as one. (See, e.g., R III: –)

Though Neoplatonic cosmology received various formulations in Islamic thought and especially in the Isma'ili tradition, microcosmism maintained its prominence in different systems. There are two points which, however, make the system of the Ikhwan more easily applicable to the microcosm-macrocosm analogy than, for instance, al-Farabi's and later Isma'ilis's, such as al-Kirmani's, systems. The first is that the Ikhwan do not divide the intellect into several levels and therefore keep their cosmological system way rather simple. The second point facilitating the microcosmic speculation in the cosmological frames of the Rasa'il is the definition of the Universal Soul and its relation to other hypostases. In the Rasa'il, the human intellect is not examined separately from the soul, but as a faculty of the soul (see ..) or as the human soul in its actualized form (B: , see ...). Sometimes when hypostases are treated together with microcosmism, the Ikhwan also define the Universal Intellect in relation to the Universal Soul. In the 10th epistle (R II: 10), the Universal Intellect is seen as the divine faculty helping the Universal Soul (al-quwwa al-ilahiyya al-mu'ayyida li-n-nafs al-kulliyah).

An important question in amalgamating Neoplatonic cosmology with microcosmism (see ..), posed by Schlanger (: 10), is also relevant in the case of the Ikhwan: if man as the microcosm is an all-encompassing being and includes creation in its entirety, how is man located in the hierarchy of beings? Both of Allers's propositions to avoid this contradiction – Neopythagorean influence or the collective interpretation of the microcosm-macrocosm analogy – might solve the problem in the case of the Ikhwan. The cosmology of the Ikhwan is not, however, purely Neoplatonic and includes, among others, also Aristotelian influence. In general the interpretation of emanationism represented by the Ikhwan seems to adopt the idea of man as the microcosm quite easily.

The explicit comparisons presented in the first part of this subsection are problematic from the point of view of this study. Metaphors, whose aim seems to be simply to describe the cosmos as a unified system comparable to man, are extensively used in all branches of Islamic thought. They do not clearly stand as any kind of metaphysical claims or necessarily imply any more profound meaning given to the microcosm-macrocosm analogy. Even the Ikhwan seem to treat this kind of analogy in a manner different from its other forms: although in most of its forms the microcosmic position in the Rasa'il is clearly reserved for the human being, in these cosmological contexts the Ikhwan sometimes parallel the universe with an animal or a city. In this way, these explicit comparisons do not necessarily represent metaphysical microcosmism and definitely do not restrict the examination of the analogy with the human being, which was noted as a defining feature of microcosmism in this study. In the cosmological frames of the Rasa'il, these comparisons are, however, difficult to see as completely separate from other

more metaphysical forms of the analogy and they often appear connected with them. Also the wide use of these cosmological comparisons in the *Rasa.il* might indicate that their meaning is here different from those of peripatetic works. For the Ikhwan, the analogy between the universe and the human being may have taken such an essential cosmological role because of their ontological system suitable for this, or even vice versa – their interpretation of emanationism may have taken that form precisely because of the importance of microcosmism for the Ikhwan.

## . THE HUMAN ARCHETYPE AS A MICROCOSM

Cosmologically the origin of humanity is considered to be the specific soul of the human species or the Platonic idea of man. This kind of primordial man or cosmological prototype of human species in this subsection will be referred to as the human archetype. The human archetype is related to the creation of the individual man and in some cases also to the perfection of the individual man. In the *Rasa.il*, the human archetype is presented as a microcosm in its various forms, which arouses the question whether it might even explain the meaning of the analogy more generally.

### .. Adam and the Human-Specific Explanation of the Analogy

In the *Rasa.il*, the hierarchy of souls is closely related to the specific archetypes of each species. The specific soul (an-nafs an-naw.iyya) can be seen as the archetype of species, and, when it comes to the human species, the universal human rational soul (an-nafs an-na.iqa al-insaniyya al-kulliyya) or simply the universal human soul (an-nafs al-kulliyya al-insaniyya) can be regarded as the human archetype. Hence, the human archetype is the universal, purely spiritual forefather of human beings of which each man is an individuation. As will be seen, the Ikhwan use the term “the absolute universal human being” (al-insan al-mu.laq al-kulli) synonymously with the universal human rational soul, and, in addition to this, as de Callataÿ (b: ) affirms, they refer to it also as Adam, or the First Adam (al-Adam al-awwal).

As we can see in the following passage of the 2nd epistle, the human archetype is the guardian angel of the human species and the vicegerent of God on earth, who is the head of the other created souls:

Said the King, “Who is the chief angel charged with the care and welfare of the children of Adam? “That,” said the Sage, “is the universal human rational Soul [an-nafs an-na.iqa al-insaniyya al-kulliyya], vicegerent of God [e.g., Q. :] on his Earth. She it was, who was linked to Adam’s body when he was formed from Earth, and the angels all bowed down to him together [Q. :]. These angels are the animal soul, directed by the rational. The universal rational soul is still in Adam’s seed, just as the corporeal form of Adam’s body survives in his seed. (G: , trans. Goodman and

McGregor, in G: )

This passage clarifies the distinction between the Earthly Adam and his universal counterpart: the human archetype is the soul appearing in the material form for the first time in the first created man, and this seed or principle of humanity is transmitted through him further to the descendants of Adam.

The idea that the Earthly Adam is the first individuation of the human archetype and all later individual human souls are its individuations is presented in the ninth epistle. At the beginning of the epistle (R I: –), there is a description of the creation of the human being and it is told that man was created in the best form (fi a.san .ura) of all animals. He was made capable of receiving all characteristics and to learn all sciences, humanities, mathematics, knowledge and politics. His body was formed of different members and shapes and he was given all human skills and activities as well as angelic deeds. “This was because the structure of his body brought together all components of the mixture of the four elements and all nine temperaments aiming at the balance (i.tidal) for it to be in the right state and to be able to receive all characteristics of animals and specialities of natures.” The Ikhwan affirm that all this was done to enable man to become like God, whose vicegerent he is on earth (e.g., Q. :). Some pages later, there is a lengthy description of the vicegerent of God as the human archetype, now referred to also as the universal absolute man (al-insan al-mu.laq al-kulli):

If a human being were innately to have all the characteristics (akhlaq), he would not have difficulties in manifesting all the activities (af.al) and all the arts (.ana.i.). But it is not an individual man, only the absolute universal human being, who innately receives

every characteristic and is able to manifest all the arts and works. Know that all people are individuations of this absolute human being, and he was the one we have mentioned as the vicegerent of God on his Earth since the day of the creation of Adam, the father of human beings, until the day of the Great Resurrection. It is the universal human soul (an-nafs al-kulliyya al-insaniyya), which is present in all individual human beings. Like God says, your creation and your upraising are but as a single soul. (Q. :) we have explained in the epistle on resurrection. Know, oh brother, and may God with a spirit from him help you, that this absolute man, whom we have said to be the vicegerent of God on Earth, is innately able to receive all the human characteristics, all the sciences of humanity and all the arts of wisdom. And he is present at all times and eras, within each individual man. From the absolute man are manifested all the activities,

sciences, characteristics and arts of an individual. Among the individuals, however, some are better prepared than others to receive sciences, arts, characteristics or works, which are manifested in them accordingly. (R I: )

Although the microcosm is not explicitly presented we can find various references to microcosmism as it is defined in this study. First the vicegerent of God and later the human archetype is defined as the microcosm from three different perspectives. These nonspecific references to microcosmism are related to other contexts in which the Ikhwan scrutinize the microcosmic man more profoundly and can, for that, be analysed through them.

Firstly, the human archetype is said to innately have all the “characteristics” (akhlaq), which are later defined specifically to refer to human characteristics. This reminds one of the idea of the human being bringing together the specialities (kha.iyyat) of different animal species. As will be seen in more detail below, Allers (: –) presents this as an example of elementaristic microcosmism. There is, however, an essential difference – the passage above explicitly refers only to human characteristics. The form of the analogy is, though, similar: the microcosmic position arises from bringing together attributes and, thus, summarizing a larger collective of individuals (men) or a class of beings (animals). Even more clearly this passage resembles the microcosm of nations in the nd epistle, which, however, cannot be seen as its own “form of microcosmism” since it occurs only as one brief reference in the Rasa.il (see ..).

Secondly, the human archetype manifests “all the activities and arts”. This might also be connected with passages treating some particular art or a science as a microcosm, which fall into the category of aesthetic holistic microcosmism (see .), or, on the other hand, with the ideal of an individual art appearing in the human body, when the analogy is structural (see ...). What is to be noted, however, is that in the latter the concentration is on the bodily aspect of man, while the human archetype is a purely spiritual being. Alternatively, the human archetype as a manifestation of “all the activities and arts” can be read as a reference to the all ability of the human archetype and, hence, as a variation of the third aspect connected to knowledge.

Thirdly, the human archetype is said to be “innately able to receive” all the sciences and skills of wisdom. This may be read through microcosmism in some of its epistemological – or in Allers’s terms psychological – forms, for instance, as a reference to the human intellect as a potential microcosm (see ..). As a human-specific variation of epistemological microcosmism, it is of interest also in the light of the Hippocratic Maxim (see ... n. ). The idea that the universal man contains all knowledge is a natural consequence from the Qur.anic view that God taught Adam all names (Q. :). The last sentence of the passage highlights differences between human individuals: although it is the universal human archetype

who embodies all possibilities, some individual men are intellectually more capable in all fields than others.

What is interesting about the Ikhwan's passage describing the human archetype is that in it microcosmism is understood as a feature shared by humanity as a whole. Since the authors refer to various forms of the analogy, it could even be interpreted as a clarification of the meaning of the idea in general: do the Ikhwan in this passage indicate that microcosmism is something specific for the human being and does not have much to do with an individual human being? It is to be noticed, however, that in this context the human being is considered only at the level of the soul, and the physiological aspect – undisputedly essential for the authors of the *Rasa'il* – is excluded. Furthermore, it is noteworthy that references to the human archetype cannot be found in the microcosmic epistles.

One possible perspective to the human archetype is its attachment to the concept of the Imam. Marquet (: ) remarks that the human archetype (or, as he calls it, "Adam céleste") is, more than anything, the archetypal soul of all the prophets and Imams. In the 4th epistle (R IV: ), where the Imam is described, it is said that the (good) properties (khi.al) of man are brought together in one human individual, who is the Imam. In the light of the description of the human archetype bringing together all human characteristics (akhlaq), the possibility that the passage above would refer to (the soul of) the Imam cannot be discounted.

Adam is also presented as the microcosm in the *Mishkat al-anwar*, in which al-Ghazali ((b): ) says that "God showed beneficence to Adam. He gave him an abridged form that brings together every sort of thing found in the cosmos. It is as if Adam is everything in the cosmos, or an abridged transcription (nuskha) of the world." (Trans. Buchman) Al-Ghazali does not, at least in this context, go into details of the cosmological position of Adam. It seems that this is more of a reference to the microcosmic Adam as the representative of the human species than to the human archetype as the microcosm in particular.

Although not employing the terms occurring in the *Rasa'il*, the author of *Ghayat al-akim* presents a similar view of the human archetype as that of the Ikhwan. In the *Ghaya* (–), the archetypal human being is referred to as the universal man (al-insan al-kulli) and the form of the universal man is said to be found in the form of an individual man. This universal man is a purely intellectual, spiritual being, which is constituted of simple substance. Whereas an individual man is the combined, evanescent form in the lower world (al-.alam al-asfal), the universal man is a pure form, unattached to matter, and pertains to the higher world (al-.alam al-a'la). It is explained that an individual, physical man, consisting of the thick material and appearing as a combination of the soul, particular



intellect, and a body, is merely a husk or an image (.anam) of the universal man. This relationship also clarifies the cosmological position of the human archetype: while the form (.ura) of an individual man is like a husk or an image of the form of the universal man, the form of the universal man is like a husk or an image of the Universal Soul (an-nafs al-kulliyya). The form of the Universal Soul, on the other hand, is a husk or an image of the Universal Intellect (al-.aql al-kulli) whose form, finally, is a husk or an image of the Light. In the Ghaya the universal man is not explicitly described as a microcosm, but it is said that in him, “there is resemblance of all things” ().

The Ikhwan do not define the human archetype in the frame of their cosmology as clearly as the author of the Ghaya, but what is evident is that it is different from that of the earthly human being. The earthly Adam, being the last one to be created, stands evidently at the ninth stage of the emanationistic system. As de Callataÿ (b: –) mentions, the First Adam, meaning the human archetype, is located in a very high rank in the emanationistic system of the Ikhwan.

all the qualities (khi.al) of all angels and prophets. The same is said to apply to three other prophets as well, Da.ud (David), Sulaiman (Solomon) and Yusuf (Joseph).

### .. Gabriel – the Platonic Idea of the Human Being

Suhrawardi treats the topic of the human archetype in many of his works. In the .ikma, the cosmological position of the human archetype is defined by means of the Suhrawardian metaphorical language of light:

From one of the dominating lights, the incorporeal light that is the controlling light in the human fortresses is brought in the being for the human – the most perfect – constitution.

That dominating light [nur qahir] is the lord of the talisman [.a.ib a.-.ilism] of the rational species. It is Gabriel – upon him be peace! – the proximate among the mighty lords of the kingdom of dominance. It is “Ravan-Bakhsh,” the holy spirit, the bestower of knowledge and confirmation, the giver of life and virtue. This emanated light is the managing light [nur mudabbir], the “commander of humanity,” that which calls itself “I.” (Suhrawardi (a): , trans. Walbridge and Ziai)

Gabriel is the lord of the talisman (.a.ib a.-.ilism) of the human species, the dominating light which controls the individual managing lights – in this case the individual human souls. The Suhrawardian human archetype is usually referred to as Gabriel, which lays emphasis on the human archetype as the guardian angel of the human species, a view which, as we saw, also occurs in the Rasa.il. The Persian name used of the human archetype is Ravan-Bakhsh, the Giver of Spirit which –

as well as the role of the angel Gabriel in the descent of the Qur'an – emphasizes the role of the human archetype as the transmitter of the spiritual and, in the case of Gabriel, divine knowledge to the material world.

It seems quite clear that for Suhrawardi, the dominating lights are Platonic ideas, as Walbridge and Ziai (Suhrawardi (a): ) affirm. In his discussion on universals, Suhrawardi refers to the views of the ancients, Plato among others, and says:

When they said ‘there is a universal man in the world of intellect,’ they meant that there is a dominating light containing different interacting rays and whose shadow among magnitudes is the form of man. It is a universal – not in the sense that it is a predicate, but in the sense that it has the same relation of emanation to these individuals. It is as though it were the totality and the principle. This universal is not that universal whose conception does not preclude being shared; for they believe that it has a particularized essence and that it knows its essence. How, then, can it be a universal idea? When they called one of the spheres a universal orb and another particular, they did not mean ‘universal’ in the sense used in logic. (Suhrawardi (a): , trans. Walbridge and Ziai) This passage indicates that Suhrawardi does not use the term “universal” in the

sense of logic, but it has a metaphysical meaning similar to the Platonic idea. The archetype or talisman is for Suhrawardi the essence of the existing thing, and he remarks that: “[i]f the nature of anything is taken without its qualities, it is the light for which that thing is the image” (Suhrawardi (a): ). If the human archetype is seen as the Platonic idea of man, it should also contain the ideal state of the human being, and as such, be the model for the perfect man. Hence, this should be the case at least in Suhrawardi’s text, although it is not explicitly expressed.

The Suhrawardian human archetype is also presented as the Active Intellect. In Hayakil an-nur, Suhrawardi ((d): ) mentions that “of the sum of dominating lights is our father and the lord of the talismans of our species, through which our souls emanate and are perfected by the Holy Spirit. Among the wise, it is called the Active Intellect (al-.aql al-fa..al).”

In the .ikma and in Hayakil an-nur, Gabriel is not linked with microcosmism, but in the allegorical story Avaz-i parr-i Jibra.il there is a passage which is of interest from this perspective:

Gabriel has two wings, the right wing is pure light, the totality of which is an abstraction of the relation between his being and God. The left wing has traces of darkness, like dark spots on the surface of the moon that resemble peacock’s feet. That is a sign

that his being has one side toward non-being [...] Therefore the vainglorious world of sound and shadow is Gabriel's wing, that is, his left wing, while enlightened souls are from his right wing. (Suhrawardi  
(b): –, trans. Thackston)

As can be seen, the twofold nature of Gabriel is the core of this passage and the two wings of the human archetype represent the spiritual and the material worlds: light in Suhrawardi's cosmology means being and darkness non-being. This is clearly an example of elementaristic microcosmism in Allers's division and resembles in many ways the analogy as it will be presented in the next subsection,

..  
In addition to bringing together two aspects of being, the passage implies that the human archetype produces and works as a mediator in the creation of these two aspects. It is said that "enlightened souls are from his right wing", which echoes the mythological concept of the creation of the world from the primordial man (see ..). Man as a divine plan according to which God creates the universe has worked as an explanation for the existing analogy between man and the macrocosm in various tradition, for instance, in Indo-Iranian mythology. It would be too much to say that Suhrawardi supported this idea of creation, but at least at the level of language, this passage might imply that there were Iranian influences in his microcosmism. In general, Iranian elements appear quite often in Suhrawardi's philosophical language – that could be seen, for instance, in his way of referring to the human archetype as Ravan-Bakhsh.

There are traces of this ancient view elsewhere in Islamic philosophy as well.  
.usi

pronounces in his Raw.a () that, being a microcosm (.alam-i .aghir), man is a model (namudar) of the macrocosm (.alam-i kabir). Elsewhere in the same work he explains:

The macrocosm from the circumference of the highest sphere to depths of the centre of the Earth, is one individual who is called the Universal Man (insan-i kulli). Since the sign of a mature person is the ability to procreate, when the macrocosm, which is the Universal Man, reached complete maturity, what he produced as the like of himself was the individual human being (insan-i juzwi), who in appearance is the macrocosm, but in reality (ma.na) is the macrocosm in the microcosm. (.usi: , trans. Badakhchani)

In this passage we can find a reference to the anthropomorphic universe which is, at the same time, described as the universal man who is the prototype of the individual man. The ability to procreate is found in both the macrocosm and the microcosm,

and the emanation of the individual man from the universal man is paralleled with it. At the end of the citation there is an interesting view concerning an individual man as, on the one hand, the macrocosm and, on the other, the macrocosm of the microcosm. Ambiguity concerning whether man is the microcosm or the macrocosm occurs in the Jabirian Corpus as well (see ..).

As can be seen, for the Ikhwan the human archetype was more loosely defined as the forefather of the human species, but in Suhrawardi's Gabriel Platonic philosophy is combined with earlier mythological concepts, which are employed at least on the terminological level. Although microcosmism is seldom explicitly linked with the human archetype, it is obviously attached to this aspect of humanity as well. In addition to elementaristic microcosmism appearing in other texts as well, the human archetype in the Rasa'il is connected with various other forms of the analogy, although their significance for the authors in this context is left rather obscure and can be analysed more profoundly only in the light of their microcosmism more generally.

## . MAN AS THE MIDDLE BEING

Microcosmism is often employed to define man's location in cosmological systems. It is common to treat the human being as the unifying level of creation, which brings together the opposites in the universe. According to Allers (: ), the elementaristic microcosm-macrocosm analogy emphasizes man as "the centre of creation", which is defined as this kind of the middle being. In this subsection I will examine different views to the cosmological middle position of man and their connection with the microcosm-macrocosm analogy.

### .. The Twofold Nature of Man

The most common twofold division in man is that between the body and the soul. Man as a psychophysical whole will, however, be treated in detail in Chapter . and only some aspects related to this will be examined in this chapter. One of these is the idea of man as the intermediate level between the material world and the spiritual world. This is elaborated especially by Ibn .

Arabi, who employs the

Qur'anic (:) term *barzakh* for the human being. As Chittick (: —)

remarks, this is, however, not a unique feature of the human species, but every being can be seen as an intermediate being between two levels of existence. At the macrocosmic level, Ibn .Arabi uses *barzakh* to refer to the imaginative world, which forms an intermediate level between the material and the spiritual worlds. Man is *barzakhi*, because in him the spiritual soul and the material body are integrated.

In the *Tadbirat*, Ibn .Arabi

() mentions the twofold nature of man in

the context of an explicit microcosm-macrocosm analogy: “Like in the world there are things that are perceivable by the eye and hidden things, in the human being there is the outer (.ahir) and the inner (ba.in): the sensible world and the world of the heart, and the outer is the kingdom (mulk) and the inner is the sovereignty (malakut).”

The Ikhwan treat the middle position of the human being from various different perspectives at the beginning of the 3rd epistle (R III: –). The middle position (mutawassi.a) of man can be seen in his size: he is neither small nor big. He is neither preceding in time other beings – like the four elements – nor succeeding them – like the artefacts made by human hand. Among animals, he is neither the strongest one, nor the weakest. The same is said to apply to his senses, which are neither extremely efficient nor extremely weak. In the 1st epistle (R

III: ), this middle position is even extended to the human voice: in the context of different voices, it is explained that the human voice stands at the harmonic middle position among all animal voices.

Among the most often treated aspects of man’s intermediate position is his rank between the levels of the lowest and the highest of spiritual beings: angels and devils. According to the Ikhwan (R II: –), as the middle being between the material and the spiritual worlds, man is able to attain features of beings located in the spiritual world – angels. At the same time, man carries a potential for evil within him; the characteristics of jinnis and devils are also part of the soul of the human being (R II: ). In order to achieve spiritual perfection, one should conquer the lower features and actualize the angelic features latent in the human soul, so that when the soul separates from the body in death, man may become either angel or devil. In their prologue to the 2nd epistle the authors summarize their position: “Man at his best, we shall show, is a noble angel, the finest of creatures; but at his worst, an accursed devil, the bane of creation.” (G: , trans. Goodman and McGregor, in G: )

This topic is treated more profoundly by al-Ghazali. It is a key concept of his ethics and, according to Taneli Kukkonen (: ) “[t]his schizophrenic condition is painted in the starkest of terms in al-Ghazali’s writings; it motivates the better part of his reflections on human psychology.” In all his (mystical) works, man is presented as a two-faced being between the animal and the divine, and the rank of the human being is one between that of beasts and angels (see, e.g., alGhazali (a) and (c): ). In .Aja.ib al-qalb, it is explained that when it comes to one’s innate disposition (fi.ra), the attraction of both bestial and angelic potentials is equal, and it is up to the human being himself in which direction he leads his soul ((c): ).

In the *ikma* the middle position of the human being is shortly referred to when the hierarchy inside the human species is clarified. According to Suhrawardi ((a): ), some of the managing lights, meaning the souls of individuals – in this case human individuals – are “nearly intellect while the lower of them are nearly like those of the beasts” (trans. Walbridge and Ziai).

Sometimes the middle position is explained by the spiritual faculties of the human being, a view which is present in al-Ghazali’s *Mizan al-amal* as well ((a): ). This is emphasized in *Sirr al-khaliqa*. In the *Sirr* (–, V .), the author declares that man is the link (wa.l) between the intelligent and bestial beings, because in him there is the intellectual faculty (at-tafakkur) pertaining to intelligent beings and, on the other hand, the faculties of beasts, which lack intellect. The faculties of man explain his middle position in the *Sirr* (, V .) also when he is linked to other animals through his flesh, hair and blood, as well as through his movements, desire, anger, senses and breath. The human being shares with minerals the fact that his body is corruptible and he is a mixture of the four elements and with plants the fact that various faculties appear in both. Man, however, also has knowledge and other intellectual faculties pertaining to incorporeal beings: “For all this I say that the human being is between the intellectual and the sensible natures, and for this participates the whole nature” (, V .). In the fifth chapter (, V .), man is said to have four attributes: he is living (.ayy), meaning that he has a soul and senses; reflective (mutafakkir), meaning that he does not pertain to beasts; mortal, meaning that he does not pertain to the eternal ones; and he seeks knowledge, which distinguishes him from the jinn, whose knowledge is not based on learning.

The author of the *Sirr* also approaches the middle position of the human species between existence and non-existence from a quite exceptional perspective, that of alimentation. In the ontology of the work, the Aristotelian concepts of movement (al-araka) and immobility (as-sukun) are often used in reference to existence or life and non-existence or death (e.g., , VI .). In the sixth chapter of the *Sirr* (–, VI .–), the different diets of beings are explained and it is said that, for the sake of balance, it would be impossible for all animals to be carnivores or for all to be herbivores. This is explained by their ontological positions. Animals that have more movement in them than immobility eat meat and the ones that have more immobility and are, in that way, closer to plants, do not eat meat. Eating meat is also connected with activity and masculinity, while eating herbs is considered to be passive and feminine. The human being, being a combination (murakkab) of movement and immobility, eats both plants and animals. The fact that man is omnivorous has to do with the balance of the universe as a whole: “If man was only to eat bread and not meat and varied things,

he would never complete sowing and spheres would be demolished, and all things would perish and vanish” ().

As can be seen from these examples, the middle position of man can be understood in various ways: as an actual ontological position of all men or as an ethical concept regarding human perfection. In the *Sirr*, the emphasis is more clearly on describing different aspects of humanity, and, though the angelic or rational is interpreted as the higher aspect in man, the focus is clearly on ontology instead of ethics. When the intermediate position is understood in the way of al-Ghazali, the ethical dimension is obvious. For him the specific, innate all-encompassing nature is something that an individual man should leave behind to become angelic in his perfection. The *Ikhwan* seem to stand somewhere in between these views.

### .. Between Light and Darkness

The relationship between existence and non-existence, which Neoplatonic ontology equates with the relationship between the spiritual and the material, is in many texts explained by the light metaphor. Usually light stands for pure existence while darkness symbolizes non-existence. I will examine some general features of the light metaphor and scrutinize the ways this allegorical language is used in the descriptions of man as the microcosm. In this chapter, the light metaphor will be examined only when it is related to the cosmological middle position of the human being.

The light metaphor occurs often in the *Rasa'il*. It is used in descriptions of the cosmological system, where being or existence is equated with light. Baffioni (b) notes that the light metaphor is used in several ways in representations of the cosmological system in the *Rasa'il*. Al-Ghazali's *Mishkat* is constructed in the form of a commentary to the Light Verse of the *Qur'an* (:), and the light metaphor is an essential topic in the work. Even if the light metaphor was in regular use in the earlier traditions as well, the one who developed it most extensively in the Islamic tradition, taking it as the key to his whole philosophy, was Suhrawardi. In addition to these quite obvious examples of the use of the light metaphor, references to it appear in other texts as well. In the *Sirr*, for instance, the dualism of movement and immobility is connected with the light metaphor, and life is also referred to as light: “The life and the light are one thing: if there is no life in something, there is no light in it, and if there is movement in something, there is life in it, and if there is life in something, there is light in it” (, VI ).

As was seen above (.), in Suhrawardi's thought the middle position of the human being is explained by the light metaphor. In *Avaz-i parr-i Jibra'il*, Suhrawardi ((b): ) describes the human archetype Gabriel as the middle being

between the spiritual and the material worlds, explaining that Gabriel has two wings, the right one representing light and the left one representing darkness. In Suhrawardi's case, however, the idea of man as a microcosm is seldom explained through the light metaphor.

When it comes to the microcosmic epistles of the Rasa'il, the Ikhwan use the metaphor of light to explain the relationship between the soul and the intellect:

On the other hand, the relationship of the Soul to the Intellect is like the relationship between the shining (.aw.) of the moon to the light of the sun. The relationship of the Intellect to the Creator is like that of the sunlight to the sun itself. When the moon is filled with the light of the sun, its light resembles that of the sun. In a similar manner, when the Soul receives emanation from the Intellect, its virtues are completed and its acts resemble those of the Intellect. (R II: )

The relationship of the intellect to the soul is elsewhere described to be like that of light to the eye (R II: ). Except for these kinds of references, the cosmological light metaphor does not seem essential for the authors of the Rasa'il in the context of the microcosm-macrocosm analogy.

Ibn .Arabi, however, uses the light metaphor to refer to the twofold nature of man more extensively than the authors we have discussed up till now. In the first chapter of the Tadbirat (–), he refers to it briefly mentioning that in Sufism the body of a human being is often regarded as a place of darkness. God is the Light resembling the sun, but, in addition to this highest light, he adds, there are other lights which are the perfect men. They are like other suns, and they may as well transmit light to the dark bodies. Elsewhere in the same work Ibn .Arabi employs the cosmological light metaphor and explicitly describes man as the middle being. In the eighth chapter on physiognomy he says that the human spirit (ar-ru. al-insani) has one face towards light and another towards darkness. The essence of the human spirit is to be a mediator (mutawassi.a) between light, which is the intellect, and darkness, which is matter. This is due to it being created, like the Universal Soul (an-nafs al-kulliyya), to manage a material body. In some people one of these two – light or darkness – dominates. The ideal state for a man is the balance of the two and, when it is achieved, it can also be seen in the physical appearance of a man in the harmonious proportions of his body. (Ibn .Arabi: – ) This is exceptional, because it indicates that Ibn .Arabi actually sees the middle position not primarily as an innate feature of the human species, but as something ideal that should be sought after.



The light metaphor, though important in the texts, is an ontological theme only loosely related to microcosmism. It appears at times linked with the microcosm-macrocosm analogy, but is seldom elaborated, even if it obviously is – as can be seen in Ibn .Arabi’s Tadbirat – connected with the topic of man as the middle being and, hence, with the elementaristic microcosmism.

## . MAN EPITOMIZING SPECIES

Microcosmism is also present when the role of the human being among sublunar beings is examined. This subsection will continue with the theme of the middle position of man, but now the focus will be on the realms of the muwalladat: minerals, plants and animals. One dimension of this position is idea of the human being epitomizing other realms of the sublunar world. The topic will be treated from the perspective of the specific characteristics of the animal species. In Allers’s classification, this is presented as a variation of elementaristic microcosmism. Before proceeding to the topic, it is necessary to briefly consider some general attitudes of the authors towards other realms of beings, especially that of the .ayawan, which will also clarify their views to be presented later.

### .. Plants – Animals – Man

In all the studied texts, man is described as the vicegerent of God khalifat allah (e.g., Q. :) on earth, and, for this, seen to reign over other realms and species dwelling on the earth (see, e.g., R I: ). As the ruler of all species he is different from the other .ayawan. The Ikhwan keep repeating that man is the most perfect (akmal) being, because he epitomizes all the ka.inat under the sphere of the Moon (e.g., R II: ).

Especially in the th epistle (R III: –) it can be seen that the chain of being and the continuity between species is an important aspect in the cosmology of the Ikhwan. The first species is close to the second species and the second to the third and so forth, and the similarities between species are emphasized. There is an order and hierarchy between beings in the World of Generation and Corruption, which is like that of numbers or heavenly bodies. The lowest minerals are close to dust (turab) and the highest ones to the lowest of the plants – that is to say, to truffles and mushrooms. The highest plant, on the other hand, is the date-palm, which is close to animals. Instead of concentrating on physical features, in which the ape is closest to man, often the elephant or the horse is described as the animal next to man due to their spiritual abilities. Often in the Rasa.il the human being is considered to be one of the .ayawan and man is seen as the highest of the animals. Here the Ikhwan, however, define the human species as its own realm: “The highest plant is related to the animals, the highest animal to the human being, and the highest human being to the angels.”

A similar hierarchy of species is common in Islamic mediaeval thought and, for example, Suhrawardi ((a): ), speaking of the hierarchy of the dominating lights, writes: “Some minerals, like the coral, closely approach the position (hai.a) of plants; and some plants, like the date-palm, closely approach the position of animals. Some animals, such as the ape, approach the human being in the perfection of their inner faculties and in other respects.”

The general attitude of the Ikhwan towards animals is surprisingly positive for their time, especially in the nd epistle. Differences between animal species are explained by the number of faculties each of them has: just as different animal species have different numbers of senses, there are various ranks among men according to their ability to acquire knowledge (R IV: ). In the epistle on music, the hierarchy among animals is related to the faculty of speech (al-quwwa an-na.iqa). Producing sounds is defined as the ability separating “dumb” animals from others: “With regard to dumb animals, such as fish, crabs, turtles and others, they are dumb because they have neither lungs nor wings and so produce no sounds” (W: , trans. Wright, in W: ).

In addition to speech, conscious perception (tamyiz) and intellectual faculty, which are defined as faculties distinguishing man from animals (e.g., R III: ), a unique feature of the human being is his upright posture: plants have their “head” towards the centre of the earth, animals are somewhere in the middle, but the human being stands with his head towards the heavens (see, e.g., G: ). In the Sirr (–, VI .), this is explained by the harmony of elements found in the human being. Man is directed upwards, resembling the nature of the air, but is heavy because of the element of earth within him. In animals, the four elements can be found in unequal quantities, which explains, for instance, differences between the ways they move. Later (, VI .), it is explained that quadrupeds have too little air in them, while the human being as a biped is perfectly balanced in this respect. Birds, on the other hand, fly, because they are deficient in the element of earth.

In the Kitab ar-ra.ma (–), the author examines differences between human and animal souls and concludes that only a human soul may enter the human body, because it is different from the other animal souls in that it does not perish and is the only one able to receive spiritual lights. Animal souls are inferior and condemned to the sublunar world. Another major difference is the ability of speech: “The spirit of the speaking animal (ru. al-.ayawan an-na.iq) is different from the spirit of the silent animal (ru. al-.ayawan a.-.amit) and, for the difference between the two spirits and the two bodies in their combination, the one does not enter the body of the other” ().

In the chapter On the Level of Humanity and that it Resembles the Macrocosm

of the Ghaya, the noble position of man among animals is explained by his various skills. Man is able to produce all the sounds of the animals, make pictures of all of them and describe them with his tongue: “A cock does not crow, a dog does not bark or a lion roar, but in a way that man is able to imitate, changing his voice and characteristics” (Ghaya: ).

It appears logical that in the hierarchical chain of beings the higher beings include the characteristics of the lower ones. Usually, when the human being is examined as a part of the chain of beings, the distinctive characteristic between man and (other) animal species is defined as the faculty of speech, not the intellectual faculty, which, as will be seen in .., works as the defining feature of man in general definitions of the human being.

### .. Animal Characteristic in Man

In the Rasa.il, each realm of the sublunar world is said to have its special characteristics (kha..iyya). In the th epistle, the Ikhwan say that all these characteristics can be found in man:

The human being shares with all these species their special features. Hence, he has four natures which are liable to transmutation (isti.ala) and change like the four elements.

He partakes in generation and corruption like the minerals. He takes nourishment and grows like plants, senses and moves like animals and may reach immortality like angels. (R II: )

The appearance of generic features of other classes of beings in a summarized form in the human being is regarded as a variation of the elementaristic microcosmism by Allers (: –). In addition to these generic characteristics, each individual animal species has its own specific characteristics. Another, more specific form of this elementaristic analogy, assumes the appearance of these characteristics in the human being.

In the th epistle, the Ikhwan (R III: –) say that in the continuous chain of being each being always has something in common with the previous and the following ones in the chain. They list various animals which share features with the human being, the ape for its physical shape, the elephant for its wisdom, the horse for its noble character, and so on. Finally, they affirm that there is no animal, which would not share something with the human being. A more detailed exposition of this can be found in the th epistle On the Saying of the Wise that the Human Being is a Microcosm (R II: –), which connects this topic to microcosmism:

Regarding man sharing the special characteristics of all beings, you should know, oh brother, may God help you and us with a spirit from him, that each animal species has its special characteristic, which is innate to it. All of these characteristics can be found in the human-being: man is brave like a lion, cowardly like a rabbit, generous like a cock, niggardly like a dog, chaste like a fish, boastful like a raven... (R II: )

The long list continues with dozens of animals and their special features. It is mostly constructed of opposite pairs: the whale is mute while the nightingale is talkative. The fox is malicious while the sheep is gentle. In this way, the Ikhwan classify animals into two categories: those defined by positive attributes in opposition to others which are lazy, savage and in many other ways obnoxious. The description of the human being as a microcosm of animal features – both in good and bad – draws a contradictory image of man. Sharing all these features, man has the potential to be everything, possessing extremely negative features as well as positive ones. The characteristics of animals are expressed in binary pairs and, in the animal realm as a whole, positive features seem to compensate for negative ones.

The special innate characteristics of the animal species are also described in the epistle On Magic (C: –). All of them are claimed to occur in man, but to appear in him in a less strong and obvious manner than in animals. In this context, the attitude of the Ikhwan towards these animal characteristics seems quite neutral. In the th epistle (R IV: ), on the other hand, the Ikhwan explain that the human is the middle being and lists animals which are close to him: the parrot can imitate his words and voices and the camel or the donkey can serve him, and so on. In this context, mainly positive human-like features are related to certain animals.

The idea that man is a microcosm of animal features occurs in many other texts of the corpus as well. In the Sirr (, VI.), it is simply stated that because the human being participates in all elements, he also participates in all animal species and that all things are present in the human being. In the Tadbirat (), Ibn .Arabi refers to the similar view in a slightly different way and parallels the earthly desires of the human being to animals and devils in the outside world: “Like in the world there are predatory animals, satans and cattle (baha.im), so in the human being is there killing and a desire of vanquishing, victory, anger, hatred, envy, lecherous life, eating, drinking, copulating and (earthly) pleasure.”

Al-Ghazali explains the same topic in more detail and, like Ibn .Arabi, links it with the evil side of man. In .Aja.ib al-qalb, al-Ghazali ((c): ) remarks that the horse shares certain things with the donkey, but differs from it in its own special characteristics which are more noble than those of the donkey, and those special

characteristics are the ones for which it was created. Likewise, the human being shares certain things with the horse and the donkey, but was created for other purposes, which are angelic. In his work on ethics, the Mizan al-.amal ((a): ), alGhazali says that “the one who turns his interest into pursuing corporeal pleasures eating like cattle, has descended to the sphere of the beasts. He either becomes ignorant as an ox, or greedy as a pig, or mad as a dog, or spiteful as a camel, or haughty as a leopard, or sly as a fox, or combines all these like a rebellious satan.”

A view similar to that of the Mizan can be found in al-Qazwini’s .Aja.ib almakhluqat. There it is stated that man is the microcosm, for the human body is like a residence for the court of the kingdom, which is constituted of the spiritual faculties of man. On the other hand, since man eats and sleeps, he is called a plant. From the point of view of his senses and his ability to move, he is called an animal. However, according to al-Qazwini, the fact that he knows the realities of things, he is called a king. Including all this, man can, nevertheless, lean towards his animal side and be “raging like a lion, or gluttonous like cattle, or greedy like a pig, or humble like a dog, or spiteful like a camel, or lecherous like a buck, or haughty like a leopard, or sly like a fox. Or, if he summarizes all these attributes, he is a rebellious satan.” (al-Qazwini (a): ) In these examples from Ibn .Arabi, al-Ghazali and al-Qazwini, the animal side of the human being is clearly seen as a feature that tilts man towards the devil.

If in the previous example from the Rasa.il, the appearance of animal characteristics in man is regarded as a neutral or even as a positive thing, the Ikhwan are not always consistent in this topic. In the th epistle, they present the idea in a form similar to those of al-Ghazali and al-Qazwini, and the bestial in the human being is clearly seen as a negative feature. The lowest of the human beings are bound to the mundane and, like apes, they are human solely in their bodily aspect. They only acquire knowledge about the material world through the senses:

Like beasts, such people desire pleasure only from eating and drinking. Like pigs or donkeys, they only aim at contenting themselves in sexual intercourse or cohabitation, and they only strive to collect treasures, the goods of earthly life. Like ants, they amass things they do not need. Like magpies, they hoard what is not useful to them. Like peacocks, they care for no other decoration than a colourful appearance. They fight for mammon like dogs over a corpse. Their form may be human, but the deeds of their souls are those of animal and vegetative souls. (R III: )

Man as an all-encompassing being bringing together all the animal characteristics seems to have two different aspects for the authors of the Rasa.il. On the one hand, this is a neutral or even positive feature and emphasizes the abilities of animals.

This is exceptional in the mediaeval anthropocentric worldview. On the other hand, like Ibn .Arabi, al-Ghazali and al-Qazwini, the Ikhwan in their th epistle see this as something clearly negative attaching it to the diabolic side of man. These views approach the question from two different positions. In the former one, the main aim is to declare the actual position of the human being among the creation, while the latter aims at describing his potential development. The animal side of man, the lower part of the human soul or nafs bahmiyya is similar to an individual animal, such as a dog or a donkey, and should be defeated. Even if, as is usually emphasized, the middle position is an innate feature of man, in the ideal situation the animal side should be conquered by the angelic.

The Ikhwan reserve a whole subsection for this topic in their Epistle On the Saying of the Wise that the Human Being is a Microcosm. Other authors, too, treat it as being connected with the idea of the human being as the microcosm. For this, it can be seen as an essential form of the analogy, in which the human being epitomizes a collective of other beings – in this case forms a microcosm of one sublunar realm, the animals. Although it appears in Allers's systematization as well, it is exceptional among the occurrences of the microcosm-macrocosm analogy in respect to the macrocosm. Usually the macrocosm is formed by another, higher level of reality or by a whole which is easily definable as its own entity. In this case, however, a whole class of beings and their characteristic features form a level parallel to that of the human being.

A passage appearing at the end of the nd epistle of the Rasa.il could be interpreted as a variation of this form of microcosmism, with the distinction that the macrocosm is formed by the collective of human beings. After saying that no species can contain all the virtues, the Ikhwan provide a description of the perfect human being in which the virtues of each nation are brought together:

He was a Persian by breeding, Arabian by faith, a .anif by confession, Iraqi in culture, Hebrew in lore, Christian in manner, Damascene in devotion, Greek in science, Indian in discernment, Sufi in intimations, regal in character, masterful in thought, divine in awareness. (G: , trans. Goodman and McGregor, in G: –)

In this way the human being and, particularly, the perfect man is presented as a microcosm of humanity.

When the human being is approached as a microcosm of different species, the focus is clearly on the description of the specific nature of the human being. In many forms of the idea of man epitomizing animal species and especially in the last example of the microcosm of humanity, microcosmism is also connected with human perfection. This is done in two distinct ways. On the one hand, it is expressed

that one should get rid of his animal characteristics. This resembles the more general notion of man as the middle being between devil and angel and is often elaborated in these contexts. On the other hand, the microcosmic position is related to the perfect man and in order to achieve perfection one must combine the best characteristics of different animals or, as in the last example, nations.

## . PHYSIOLOGICAL ASPECT OF MICROCOSMISM

“The Creator, may he be praised, created the human being in the fairest stature (fi a.sani taqwim) and shaped him in the most perfect form and made his form the mirror for his soul, to show in it the picture of the Large World” (R II: ).

The Ikhwan, as well as many other authors, describe the human body as the most perfect of the material bodies, following in this the Qur.anic idea that the human being was created in the fairest stature (Q. :). In the passage cited above, the human body is also described as the mirror for the soul, due to which it forms a picture of the whole world, a microcosm.

No strict difference between the physical and spiritual aspects of the microcosm-macrocosm analogy can be recognized in the study corpus. In this chapter, however, I will concentrate on the physiological aspect of the idea and consider the attitudes towards the human body. The primary questions are: what does the microcosm-macrocosm analogy reveal concerning the concept of corporeality in mediaeval Islamic thought and how are the attitudes towards the human body expressed in these contexts? On the other hand, how is microcosmism employed in the description of the human body? The topics relevant from these perspectives are, naturally, those approaching the physiological aspect of the human being and the dichotomy between the material and the spiritual in man, but also the contexts

– like alchemical theory – which place their primary interest in the physical dimension of reality, although the focus of the theory concerning the human being were on him as a psychophysical whole.

Firstly, I will examine the concept of corporeality in relation to the human soul or the spiritual in man. This is a crucial topic concerning the whole physiological microcosmic idea and will, after this overview, be present also in the second subchapter in which the focus will be on the explicit physiological comparisons. Thirdly, I will turn to the mediaeval scientific worldview. The examination will be divided into four parts: theories related to astronomy, physiognomy, alchemy and music therapy. My aim is, on the one hand, to examine interpretations of microcosmism as a part of the theories in these fields and, on the other hand, to observe the importance of these disciplines in the texts in order to define the role given to the analogy in them. Through these scientific theories some elements of the explicit comparisons also become more lucid.

## . THE BODY – A PRISON OR A MOUNT?

Although the microcosmic idea in some of its forms concentrates on the human soul and in some other contexts the emphasis is on the physiological aspect of man, it accentuates the nature of the human being as a psychophysical entity. For this, the relationship between the spiritual and the corporeal is a topic related to microcosmism in many ways. It was touched upon in the previous chapter when the middle position of the human being among other creatures and as a part of the cosmological system was examined, and it will be relevant in Chapter in the context of spiritual human perfection. In this chapter, the twofold nature of man as regards his body and soul will be examined. I will, firstly, examine microcosmism in the definition of the human being and then turn to the way the body-soul relationship is treated.

### .. Microcosmism and Definition of Man

An important question concerning the position of the human being as a microcosm is what is meant by the human being: is the essence of humanity seen as spiritual or corporeal or as a combination of these two? According to the Ikhwan (R II: and III: ), a human being is a human being on account of his spiritual aspect, not his physical qualities. Rationality and logic distinguish the human being from other animals, and, in the tenth epistle on logic (B: ), the human being is defined as “living, rational and mortal, whereas other animals are living and mortal, but not rational”. In these contexts, it seems clear that for the Ikhwan the primary defining characteristic of the human being pertains to the sphere of the spiritual: what distinguishes the human being from other beings is the intellectual faculty or, more generally, the spiritual in the human being. Even so, later in the epistle on logic (B: ), the authors remark: “In fact, the language and life of a man occurs on behalf of the soul, while his death occurs on behalf of the body, as the name ‘man’ (insan) is proper to the soul as well as to the body” (trans. Baffioni, in B: ). The Ikhwan (B: ) also state that the human being is in need of logic because of his attachment to the body. If he were not, both language and logic would be unnecessary, since spiritual beings perceive things directly without these conceptual systems. Hence, logic and rationality would actually be useless without the twofold nature of man. What separates man from the animals is rationality which, at the same time, opens a window to the higher reality. Mortality, however, always keeps the human being separated from purely intellectual beings. It seems that, according to the Ikhwan, what really makes man a man is his body and soul together.

The way the Ikhwan scrutinize microcosmism in their writings shows that it is an essential feature in their definition of man. It is pointed out several times in the Rasa.il that the human being is a combination of the corporeal and the spiritual (e.g., R I: and IV: ). At the beginning of the th epistle, the human being



is described as a microcosm, because in him the two dimensions of reality are brought together:

Since man is a combination of the corporeal body and spiritual soul, the first philosophers found in the structure of his body correspondences to all beings that are in the sensible world, from the wonders of the compositions of the spheres, parts of the zodiac, movements of the heavenly bodies, compositions of the four elements (arkan wa ummahat), the variety of the minerals and the diversity of the forms of the plants to the marvels of the structures of the animals. They also found in the human soul and in the flowing of its faculties in the structure of the body correspondences to the spiritual creatures: angels, jinns, people, satans and the souls of all animals and the changes of their states in the world. (R II: )

Man includes both aspects of the created universe, while other beings may include only some spiritual aspects or are constituted of pure spiritual substance, like the angels. In the 2nd epistle On the Opinion of the Pythagoreans regarding the Origin of the Intellectual Beings (R III: ), there is, as well, an explicit reference to the human being as a microcosm and to the world as a large man, because in the structure of the human being (tarkib al-insan) meanings of all beings can be found. This, on the other hand, is due to man being a combination of the viscous (ghali.) material body and the simple (basi.) spiritual soul.

We can see that the Ikhwan's definition of the human being is in many ways connected to the twofold nature of humanity, which is defined by Allers (: ) as the "simplest form of microcosmism", the elementaristic analogy (see ..), and they also link this aspect of the idea to the term .alam .aghir.

Some other texts of this study attach the twofold nature more explicitly to the definition of the human being. In Sirr al-khaliqa (, VI .), combining the spiritual and the material is given as an essential feature of humanity. It is said that, "what makes the human being eternal (khalid) is that he is from the living spirit (ru. al-.ayat), that is to say that the human being is a combination of two opponents differing from each other: matter and spirit." The body is said to resemble the four elements while the soul resembles the active movement (.araka). Later (—, VI .) it is added, however, that the human being is different from all other beings because of his innate intellectual faculty (quwwat al-.aql). This spiritual aspect of man is also the balancing force in the twofold human being. The rational life is the middle stage between the drop (an-nu.fa) and the earth (at-turab). The first stage of the human being is the immobile drop and the last the immobile earth. In the middle, however, there is growth and life. The passage continues: "it is because in the middle of his course he is called living and

the human being, and also because in him the two aspects come together and are balanced through the spirit of the speaking (or rational) life (ru. al-.ayat an-na.iqa) (, VI.).” It is also noted that all things are present in the human being and that the human being is the microcosm (al-.alam a.-.aghir) – “.aghir” because he needs the world and is confined to it (–, VI.).

In al-Qazwini’s .Aja.ib, the chapter on the reality of the human being starts in the following way:

Know that the human being is the highest of animals and the best part of the creation. God, the Sublime, composed his wondrous construction in the best possible form, which consists of different things and various humours. God divided his substance into spirit and body and gave him the special characteristics of understanding (fahm) and reason (.aql). (al-Qazwini (a): )

A little later in the same passage, man is described as a microcosm and in this context the term .alam .aghir – which rarely appears in the work – is mentioned.

Thus, in both the Sirr and the .Aja.ib, the human being as a microcosm – in this context referring to his nature as a combination of the spiritual and the material or the microcosmic position more generally – is an essential element in the definition of man.

In the Jabirian Corpus, there is an interesting passage concerning the twofold nature of man and microcosmism. In the Kitab us.uqus al-uss al-awwal (), the author clarifies the position of man with two microcosmic references. It is remarked, firstly, that God made the human being a microcosm for his bodily aspect, which brings together the four natures appearing in the created world. Secondly, that he made man a macrocosm (sic) for his intellect (.aql). This could be read to affirm that the human being is a microcosm for both his spiritual and corporeal aspects. Then the way to call the intellect a macrocosm would simply emphasize its nobility in relation to the body. On the other hand, the passage could also be seen as a reference to the microcosm-macrocosm analogy in the human being: the body is the lower and “microcosmic” appearance of the higher macrocosm, the human intellect.

The psychophysical whole the microcosmic man forms is not absent in our Sufi texts either, but it is not in the core of their definitions of the human being. In al-Ghazali’s writings, the emphasis is much more clearly on the spiritual aspect of man. The special characteristic of the human being is mentioned several times to be knowledge (.ilm), wisdom (.ikma) or, more specifically, “gnosis (ma.rifa) of the real essences of things”. For nourishment and the ability to reproduce he is a

plant, for senses and ability to move himself voluntarily he is an animal, and when it comes to his physical form and standing posture, he is like a wall relief. Finally, however, it is knowledge which distinguishes him from the other creatures. (alGhazali (c): ) Elsewhere, the real essence of humanity is at times defined to be the heart and, at times, the soul. As for Suhrawardi, in the .ikma ((a): ), he denies the definition of the human being as a rational animal (al-.ayawan an-na.iq), which he attributes to peripatetics, and claims that rationality is accidental and posterior to the reality (.aqiqa) of humanity.

## .. The Relationship of the Body to the Soul

The body-soul relationship is an important theme in the Rasa'il. It is also closely connected with microcosmism: the theme opens the th epistle and is treated extensively in both epistles on the microcosm-macrocosm analogy. The topic appears, however, in many other contexts as well and is often explained through brief references to microcosmic comparisons. In the epistle On the Saying of the Wise that the World is a Large Man (e.g., R III: ), the human soul is seen as a prisoner in its bodily prison, which is a Neoplatonic metaphor popular in Sufi literature. In a city, there are said to be both prisons and subterranean storehouses, but also synagogues and mosques. Likewise among people there are some for whom the body is a prison for the soul and others, like prophetic souls, who manage to free themselves from mundane bonds.

Nevertheless, the tone of the analogies is not always as negative towards the bodily aspect of the human being and, in fact, in most cases, the Ikhwan define the relationship between the body and the soul in terms of mutual need: the soul, in its relation to the body, is said to be like that of fruit flesh to the peel, a dressed man to his clothes, a rider to his horse or a crew to the ship (R II: , II: , II: ,

IV: ). Although these comparisons explicitly define the body as subordinate to the soul and the obvious aim of the authors is to accentuate the dominance of the spiritual over the corporeal, they imply that the body is a crucial instrument for the soul in its reaching for perfection. The instrumental value of the body for the human being is very concretely accentuated in an analogy which compares the soul with a craftsman: the soul operates in the body employing all its faculties and parts like a craftsman, who works in his forge using all the utensils he needs (e.g., R II: – and III: ). The same instrumental tone is used in the descriptions of the body as a ship and the soul as its sailor (e.g., R III: ).

The body-soul relationship is also relevant when death is treated. It is often defined, like in the epistle on music (W: –), as the separation of the mature soul from the body: like the pearl from the oyster shell, the seed from the calyx, the foetus from the womb or fruit from the peel. In the th epistle (R III: –), the development of an individual soul is examined in more detail through the

womb metaphor: like the foetus needs the womb in order to achieve its complete form, the human soul needs the body for its mundane perfection. In the same manner that the foetus which does not reach its completion during the nine months of pregnancy cannot survive after birth, the human soul which does not reach its perfection during its mundane path does not enter Paradise. The soul separating from the body and entering the thereafter is also described by the metaphor of a man entering a new city (see, e.g., R I: ). This is interesting from the perspective of the extensively used analogy of the human body as a city dwelled in by the faculties of the soul. Elsewhere (R II: ), on the other hand, death is paralleled with the inhabitants leaving their city, which is more logical in the light of this analogy.

The question concerning the definition of death is related to the views of the Ikhwan on resurrection. The Ikhwan's position is in this respect unclear. Although they often lean towards the views of philosophers (see, e.g., R II: ), which are reflected in these analogies as well, in some contexts their views seem to be in accordance with Islamic orthodoxy.

In the other texts of the corpus, the body-soul relationship is not treated as comprehensively as in the *Rasa.il*. Sometimes microcosmism appears in the context of the body-soul relationship solely at the level of expressions. In the *.ikma*, Suhrawardi amalgamates with his light metaphorism a microcosmic expression referring to the animal and human bodies with the word fortress (.i.iya) and the rational human soul is described as a commanding light (nur isfahbad) whose image (.anam) the fortress is (see, e.g., Suhrawardi (a): ).

References to the same Neoplatonic metaphors as in the *Rasa.il* can also be found in Sufi writings. Al-Ghazali, for instance, refers to the body as a mount for the soul (see, e.g., al-Ghazali (c): and ). In addition to this, he declares that the heart needs its mundane (ad-dunya) path in order to reach perfection, since it is impossible for a creature to reach God without passing through this world. For this, the vehicle of the heart needs to be taken care of with the right food and avoidance of the things which are destructive to it. (al-Ghazali (c): )

In more detail, al-Ghazali

((c): –) examines the difference between the spiritual and physiological aspects of the human being defining the relationship between the heart as a bodily organ and its spiritual meaning. He notes that the real essence (.aqiqa) of the human being is the subtle dimension of the heart. The subtle dimension is spiritual and totally different from the bodily organ, which appears even in animals and dead bodies. In spite of this, the bodily organ is said to be connected with the spiritual heart. Although al-Ghazali refuses to go into the

details of this connection, he mentions that it is like the relationship of accidents with substance, the characteristic to the thing characterized, the user of a utensil to the utensil and the occupier of a place to the place. The heart, which is paralleled with the Throne (al-.arsh), while the chest is the Footstool (al-kursi), is then in a way responsible for the relationship between the body and the soul. This position of mediator given to the heart in .Aja.ib al-qalb is treated mostly from the perspective of mystical perfection and the (spiritual) heart appears as the encountering place for sensory knowledge and divine knowledge.

In Ghayat al-.akim (–), the relationship between the human body and the human soul is explained comparing it with the relationship of the individual man with the universal man. It is said that as the bodily form of an individual human being is to the form of an individual human being like an image or a peel, the spiritual form of an individual human being is merely an image or a peel to the form of the universal man.

Al-Qazwini ((a): ), on the other hand, illustrates the body-soul relationship with an analogy to a relationship between a wise man and a woman whom the man desires. The woman has mundane needs such as food, drink, clothes and marriage, while the man does not need any of these. Just as the wise man should get rid of his lust for a woman, so should the human soul get rid of the needs of the body. In addition to this negative description, the .Aja.ib also describes man as the microcosm because the human body is “like a residence for the court of the kingdom, which is constituted of the spiritual faculties of man” (al-Qazwini (a): ).

An interesting view to the relationship between the spiritual (ru.aniiyya) and corporeal (jismaniyya) in general can be found in Kitab ar-ra.ma (), in which the author explains that physical characteristics such as weight are dependent on the spiritual features of the being: “The burdens (athqal) of corporeal things are only dwelling places and refuges for those spiritual things, they do not have force (quwwa) or use in themselves.”

At first glance, in all these texts the soul – the nobler dimension of man – seems to be the defining element of humanity. If it is treated at all, the body is presented as subordinate to the soul. When it comes to the Ikhwan, the same discrepancy that applies to their views concerning bodily resurrection seems to characterize their conceptualization of corporeality more generally: on the one hand, they represent negative attitudes towards the human body, resembling in this Neoplatonic Sufis, and, on the other hand, they argue neutrally and even positively in

the matter expressing special interest in the bodily aspect of man and the relationship of the two aspects of man. It seems that in this their views change depending on the context. In the other texts, the body-soul relationship is treated separately to some extent, and the human body as a dwelling place for the faculties of the soul is usually seen as a neutral part of the definition of man everywhere outside the Sufi tradition.

## . EXPLICIT PHYSIOLOGICAL COMPARISONS

By explicit comparisons I refer to listings of correspondences between two layers of reality. The basic tone of comparisons is usually psychophysically holistic: when the human being is in the position of the microcosm, the body and the soul together often form a microcosm. Because of this, a distinction between the spiritual and physiological aspects of comparisons is somewhat artificial. In this chapter, however, I will concentrate on the bodily aspect of man in these comparisons and examine the way the concept of corporeality is treated in them.

In the Rasa.il, explicit physiological comparisons appear in different contexts. The 1st epistle On the Structure of the Body is for the most part dedicated to these comparisons, which underlines the importance of microcosmism in the concept of corporeality among the Ikhwan. Explicit physiological comparisons rarely appear in other texts, and when they do they are usually parts of descriptions of the human being or, at times, of the heavenly spheres. This chapter will be divided into three subsections according to the themes which define the nature of the physiological comparisons and their meaning in the philosophical systems of the texts.

### .. Comparisons and Hierarchy in the Human Body

The holistic idea of man expressed through physiological comparisons gives an image of the human body as an organism constituted of co-operating parts and members, and some comparisons seem to underline the hierarchy of this system. In the following, I will examine comparisons as expressions of the idea of man, analysing the structure of the human body and its hierarchies phrased in them. I will first concentrate on the inner organs and their functions and then turn to the human faculties and their places in the human body.

### ... Inner Organs in Comparisons

The Ikhwan seem to be particularly interested in the parallelism between functions of the heavenly bodies and the inner organs of the human body. They examine this analogy at remarkable length at the end of the 1st epistle (R II: – ). First of all, the heart is said to correspond to the Sun: both are located at the centre. From the Sun, light and life are distributed to all parts of the universe.

Likewise, heat circulates to all parts of the body from the heart. The spleen is compared to Saturn, which puts together form and matter. In a similar manner, from the spleen, blood transmits black bile's coldness and dryness to all parts of the body, which is the reason for the solid moistness of blood. The liver is related to Jupiter, because order and harmony proceed from both. Mars finds its resemblance in the gall bladder, from which yellow bile spreads to all parts of the human body as a sedative for the bodily humours. The stomach is compared with Venus, the planet of pleasures. Venus is related to all joy and enjoyment of both spiritual and material beings in the spheres and in the sublunar world. Likewise, the stomach relates to the lust for alimentation, which forms the building material for the body and its humours. The five senses, as well as consciousness and wisdom, are connected to Mercury. The spirit of Mercury resembles the flow from the middle of the brain, which causes the actions of the faculties of the human soul, such as sensing, reflection, deliberation and knowledge. The activity of the Moon is described as twofold: in the first part of each (lunar) month its face replete with light faces the earth and at the end of each month it faces the heavenly spheres. The assignment of the lungs in the human body is twofold in a similar manner: it enables the entrance of air to the body and delivers it to the heart, which spreads it to each part of the body. On the other hand, the lungs also transmit air out of the body producing, for instance, sounds and words.

Different astrological positions of the heavenly bodies have been discussed earlier in the same epistle (R II: ) in a subsection which describes the relation of the human body with the four elements. It ends with a comparison between a city-state and the heavenly bodies. The heavenly bodies stand in a relation to the Sun similar to the officers in their relation to the king. Thus, Mars is like a commander of the troops, Mercury like scribes and ministers, Jupiter like lawyers and scholars of religious sciences, Saturn like treasurers and trustees and Venus like slave-girls and songstresses. The Moon on the first days of the month is like a rebel, but acts like an imitator for the rest of the month. Although this is not a microcosm-macrocosm analogy as defined in this study, because the position of the microcosm is not reserved for man, it lays emphasis on the view that the human body is not the only layer of reality corresponding to the heavenly spheres: the same applies, for instance, to a city-state.

Inner organs are also described in city-state comparisons. A reference to this kind of analogy appears, for example, in the 2nd epistle (G: ) of the *Rasa*.il, where the holistic composition of the human body is described with the microcosm-macrocosm analogy. It is said that "There is no organ, great or small, that does not serve and minister to some other, sustaining and supporting it or enhancing its function and improving its usefulness" (trans. Goodman and McGregor, in

G: ). Then it is said that the brain is like a king and other organs and body parts form a hierarchy below it. Goodman and McGregor (G: n. ) note that the brain as the leading organ was a revolutionary view in the history of human anatomy. A similar comparison appears in the 1st epistle (G: ). In it, however, the intention is sociological. It describes the structure of a Jinn society and admires its strict hierarchy and the loyalty of the Jinns to their king. However, approximately the same counterparts appear for the planets in this comparison: “They follow their kings as the stars in the heavens follow that greatest of luminaries, the Sun. For the Sun in the celestial sphere is like a king, and the other stars are like his vassals, troops and subjects. Mars serves, as it were, as his general; Jupiter as judge, Saturn as treasurer; Mercury as minister, Venus as consort. The moon is crown prince. The other stars are his troops, vassals, and subjects.” (Trans. Goodman and McGregor, in G: ) In the 2nd epistle (R II: ), the heavenly bodies are said to be like the servants and soldiers of the Sun, whose central position, with three planets below and three above it, is like that of a king in his kingdom. Later in the same epistle (—), the central position of the earth in the universe is compared with that of the Ka’aba. Pilgrims circulating around it are like the heavenly bodies (the same comparison can be found in R II: ). This rotation of the heavenly bodies is illustrated with an Indian story of a king, who built a city with a circumference of 7 parasangs. He sent seven men to walk around the city with different daily journeys. The final duration of their journeys demonstrates the different times it takes for each of the heavenly bodies to rotate around the earth. (R II: —)

only when it was first presented by Galen. According to him, the faculties of the animal soul are in the case of higher animals governed by the brain. This was not accepted by some philosophers, and among Islamic thinkers Goodman and McGregor mention al-Farabi, who still followed the Aristotelian idea of the heart as the organ controlling the rest of the body. This is the case in the mystical tradition as well: especially al-Ghazali gives the heart a special position among the organs.

The Ikhwan are not quite clear in this either. The two comparisons of the



Rasa'il presented above contradict each – the former presents the heart as the leading organ, while in the latter the brain takes this position. These kinds of discrepancies seem to be due to comparisons simply having different premises. The former comparison concentrates on describing the functions of the inner organs, and the heart is related to the Sun simply because of its central location in the body. The latter, on the other hand, focuses more clearly on the hierarchy of the inner organs, and thus, is more relevant as regards the Ikhwan's position in defining the hierarchy in the human body. In general, although hierarchical connotations are to some extent also present in the astronomical comparisons, they usually appear more explicitly in city-state comparisons. As will be seen later, in spiritual comparisons as well, the leader of the human faculties varies depending on the emphasis of the comparison (see ...).

### ... The Body as a Dwelling Place

In some physiological comparisons, the psychophysical whole which the human being forms appear as a prevailing theme, and it is examined through the relationship between body parts and the faculties of the human being. Usually the body is presented as a dwelling place for the faculties of the soul and the physical activities of the human being:

We say: The body resembles a city in its many wonders, in the structure of its members and in the various ways of the composition of its parts. The soul is like a king of the city and its diverse faculties are like soldiers and officers in it. Its acts and movements in the body are like inhabitants and servants. That is to say, the human soul has many faculties, the number of which is only known to God, the Sublime. Each of these faculties has its own particular location in one of the members of the human body different from the others and its own particular relation to the soul different from the others. (R

II: )

The city-state comparisons, which could be called architectural comparisons when the physiological aspect is in focus, do not necessarily parallel the human body with an entire city. For instance, in the Rasa'il's epistle On the Structure of the Body, a city-state comparison is followed by a comparison which concentrates on the correspondence between the body and a house. It is clarified that in the house there is everything its inhabitants need, like in the body there is all that the soul needs. Firstly, the comparison concentrates on similarities between the body parts and the rooms of a house:

The legs upon which the body stands are like foundation of the house. The head at the highest point of the body is like the upper chamber in the house. The back is like the

back of the house and the face is like the front of the house. The neck in its length is like the portico of the house. The opening of the throat, where the voice streams from, is like the hallway. The chest in the middle of the body is like the patio of the house. The lungs are like the living and storage rooms in the house. The lungs and their coldness are like the summer-rooms. The nostrils and trachea in the throat are like ventilation. (R II: )

After that the comparison continues with a description of the organs and their functions by means of a household and the activities within it:

The heart with its innate warmth is like a winter room. The stomach which digests the food is like the kitchen. The liver and the entries of blood into it are like a room for drinking water. The courses of the veins, the circulation of the blood and the pulse to all parts of the body are like the corridors of a house. The spleen and the appearance of turbid blood into it are like a storage room for furniture. The gallbladder and the sharpness of yellow bile into it are like the weapons room. The thorax and the diaphragm are like the women's room. The intestines and the burden of food within it are like the toilet. The bladder and the coming of the urine into it are like the lavatory. (R II: —)

Then the Ikhwan turn to the apertures and materials of the human body:

The ways of excrement and urine are in the lower part of the body like the plumbing of the house. The bones supporting the body are like walls. The tendons extended to the parts of the body are like supporting trunks and crossbeams for the walls. The flesh on the bones and nerves is like mortar. The ribs are like the columns of the house. The cavities inside the bone are like chests and drawers and the marrow in them are like jewels and valuables in the drawers. The apertures in the head are like windows in the upper chambers. The breath is like smoke. The middle of the brain is like columned hall and the pupils are like reception rooms. The eyelids between them are like curtains. The mouth is like the entrance to the house and the nose is like the entrance way. The lips are like the leaves of the door. The teeth are like a lattice screen and the tongue like a chamberlain. (R II: )

At the end of the comparison, the authors refer briefly to the inhabitants of the house:

The intellect at the centre of the brain is like a king sitting in the middle of the courtyard, in the front of the house and in the meeting room. The inner senses are like boon companions and the outer senses like soldiers and spies. The eyes are like watchmen and the ears like agents who bring information to the king. The hands are like servants

and the fingers like artisans. To sum up: the body parts have their counterparts in the activity of the lord of the house. (R II: )

In this comparison the Ikhwan name among the inhabitants both the faculties of the soul, like the inner and outer senses, and the body parts, such as the tongue, eyes, ears, hands and fingers. This is remarkable, because usually in the comparisons the physiological perspective of the human being is seen as a counterpart to the material form and structure of the macrocosm, while the faculties of the soul are compared with the living or spiritual entities, in this case the inhabitants of the city. A similar phenomenon also appears, however, in the Ghaya, where the relationship between the faculties of the soul and the body parts responsible for them is examined:

His eyes are spies of the intellectual faculty (al-quwwa an-na.iqa) which is like a king. His ears are like his agents who bring information and the tongue like his interpreters. The heart is his ministry of knowledge. The stomach is his treasury house and his cooking pot and the liver like its hole for water. The gall-bladder is his self-control for its flesh not to rot and it is the salt of the body. His medicament, the lungs, are his ventilator and the hands are his chamberlains and the legs his mount. (Ghaya: )

In a less detailed manner the same appears in the .Aja.ib, where members of the body together with bodily faculties – referring most likely to the outer senses – are described as servants, while inner faculties have a higher position as different kinds of artisans.

The soul is in the body like a governor in his province. The faculties and members of the body are his servants and he gives them orders. They have to obey him and cannot oppose him. The body is a kingdom, a residence and a city of the soul. The heart is in the middle of this kingdom and the members of the body are its servants. The inner faculties are like artisans of the city. (al-Qazwini (a): –)

In this comparison, the author seems to place the soul physically in the heart, in the middle of the bodily kingdom. One of the ways of examining the body-soul relationship and the hierarchy in the human body is the presentation of the physical locations of the faculties. This occurs not only in city-state comparisons, but also in comparisons between the human being and the heavenly spheres. Then the faculties of the soul are most commonly compared with the heavenly bodies like in a comparison appearing in both the Rasa.il (e.g., R II: –) and the Ghaya (), in which the seven corporeal faculties – and as their spiritual counterparts the five senses as well as the faculty of speech and the intellectual faculty – are

paralleled with the seven heavenly bodies (see ...).

A comparison between the human faculties and heavenly spheres also occurs in the *Sirr* (—, VI.—). In it, the concentration is on the shape of the human head. In this analogy, which has its equivalents in the Greek Hermetic tradition, the correspondence depends on movement: the circularity of the human head is due to elevation of the movement. When the prime matter extended and reached its utter limit, it was cut off from its lowly origin and became circular. This explains the circular movement of the stars: the stars were created of fire which rose from inside the earth and when the fire reached the celestial spheres, it made the heavens circulate. The passage is summarized as follows: “for this I have compared the human head with the dome of the sphere, viz. because it resembles it. This is (also) why I have called him (man) the microcosm.” In addition to this structural resemblance, the seven faculties of the human being are said to be located in the head: the head has seven open doors, which, like the seven planets ruling the spheres, rule and guide the human being in everything.

Also in the *Ghaya* (), there is a comparison emphasizing the location of the spiritual faculties in the head. There it is explained that the human head resembles the heavenly spheres for four reasons. First of all, it is spherical and circular in shape. In addition to these physical qualities, the subtlety and the lights of the head resemble the lights at the level of the spheres. These lights are the human senses, which are listed as sight, hearing, touch, taste and speech.

The faculties and their relationships with the human body are examined in more detail in various comparisons, which are more relevant from the perspective of the spiritual in the human being than his bodily aspect (see ...). Often these descriptions explain the locations of the outer senses – sight, hearing, touch, smell and taste – which mostly occur in the body parts connected to them and, in this way, the human body appears as a dwelling place and a physical basis for the functions of these abilities. The inner or spiritual cognitive faculties are also related to the corporeal aspect of the human being since they have their location in the different cavities of the brain. In spite of their physiological aspect, these comparisons, employed, for instance, by the *Ikhwan* and *al-Qazwini*, evidently concentrate on the epistemological perspective of the human being. Nevertheless, they show that the microcosmic idea has – even in this clearly spiritual form – a physiological dimension as well, and especially the *Ikhwan* are interested in scrutinizing details of the relationship between the body and the soul even when it comes to cognitive theories.

.. Mythological Features of Comparisons

The philosophical meaning of the physiological comparisons is often difficult to define. Many elements appearing in them are due to the influence of earlier traditions of microcosmism. An important – and probably the most obvious – aspect of the physiological comparisons is the influence of mythological traditions. These analogies were one of the routes through which the earlier Middle Eastern mythological, cosmological and anthropological views were transmitted to the Islamic tradition. Naturally, in the corpus such unIslamic mythological ideas as the creation of the world from the body parts of primordial man or a deity do not appear per se. Even so, as noted in the earlier research (e.g., Widengren : –), comparisons preserve many mythological elements.

A classical example of this is the comparison made by the Ikhwan between the human body and the world:

The (human) body is like the earth: bones are like mountains, the marrow like minerals. The stomach is like the ocean, the intestines like rivers, the veins like rivulets, the flesh is like soil. Hair is like plants, hairy parts like fertile lands while bald areas are like salt desert. The front-side of the human body is like inhabited lands and the back-side is like an unpopulated hinterland. What is in the front of him is like the east, what is behind is like the west. The right side resembles south while the left side is like north. Breathing is like the wind, words like thunder, speech like lightning, laughter like the daylight, tears like rain, suffering and sorrow like the darkness of the night. Sleeping is like death, being awake like life, childhood like spring, adolescence like summer, mid-life like autumn and old age like winter. (R II: –)

In the Tadbirat, Ibn .Arabi () briefly refers to an analogy resembling this and says that in the human being there is similar growth as in the Large World and it can be seen, for instance, in hair and nails. Different waters found in the universe have their equivalents in the human being as well: eyes secrete salty fluid, ears bitter fluid and sweet fluid is related to the mouth. Winds are also mentioned, but according to Ibn .Arabi (), four winds, the north wind, the south wind, the east wind and the west wind correspond to four bodily faculties: attraction, retention, digestion and excretion. Later, though, in the th chapter of the work, he treats the four seasons appearing in the Ikhwan's comparison, in a different manner. He parallels spring with youth, summer with the age of self-contemplation, autumn with death and winter with purgatory. (Ibn .Arabi –)

A passage resembling another part of the Ikhwan's comparison can be found in the Ghaya, in which it is said that: "The eyes are like the Sun and the Moon, the nostrils are like winds, the ears are like east and west. The front side is like the daytime and back is like the night." (Ghaya: )

A stronger “Islamization” of the comparison between the human body and the earth can be found in Mulla.adra’s (d. ) *Iksir al-.arifin*, in which a physiological comparison appears in the description of the resurrection and its two – greater and smaller – dimensions:

Everything in the Greater resurrection – which is the death of all the individuals of the cosmos – has an equivalent in the Smaller resurrection. When your body – which is your earth specific to you – is destroyed through your death, then the earth will have been shaken with a mighty shaking (:). When your bones – which are the mountains of your earth – decay, then (the earth and the mountains will have been lifted up) and crushed with a single blow (:) so your mountains will be scattered like ashes (:). When your heart – which is the sun of your world – is darkened at the (soul’s) extraction, then your sun will have been folded up (:). (Mulla.adra: –, trans. Chittick)

In this passage, we can see how the same elements appearing in the comparison of the *Ikhwan* are connected with Qur.anic references. Quotations from the Qur.an appear in the context of microcosmism in the *Rasa.il* as well (see .. n. ), but they are usually connected with other forms of the analogy than its physiological aspect.

Considering the transmission of physiological comparisons, an interesting example can be found in an analogy appearing in al-Qazwini’s *.Aja.ib al-makhluqat*, which seems quite likely to be connected with a similar comparison by the *Ikhwan*. In addition to the similarity between the versions of the *Ikhwan* and alQazwini, an interesting aspect of this particular comparison is that it contains some elements which resemble the mythological predecessors of Islamic microcosm-macrocosm speculation.

In the *.Aja.ib*, the comparison takes place after al-Qazwini’s description of the construction of the human body and its division into non-compound (*mutashabiha*) and compound (*murakkaba*) parts. The former are the twelve materials of the body, including bone, cartilage, nerves, ligament, flesh, artery, jugular veins, fat, membrane, skin and the cerebrum. Compounds include outer, visible organs such as eyes, ears, hair, and inner organs. Before going into details about the human faculties, al-Qazwini presents a comparison which he attributes to “some wise men”. In it, the construction process of a city is described to the smallest detail:

There is a resemblance between the human body and a city. Some wise men say that God the exalted created the human body, arranged it and blew into it his spirit. This

blowing was like the ground of the house. The composition and the joining together of the parts of the body are like the city built from different materials such as stone, mud-brick, baked bricks, gypsum, claytiles, clay, limestone, ashes, wood, iron and so forth. He built it well and raised its structure, fortified its walls, sketched its streets, divided its quarters and decorated its houses. He filled up its storehouses and made its rivers flow, opened its channels, made its domains active, put its merchants to their places and organized its rule. He gave servants to its king and created nine substances different in form, and they are materials for building the city. Then he composed the materials and set them above each other in ten layers next to each other and made them recline on pillars. Then he nailed the city up and extended its ropes and joined it with ties which were extended and twisted around it. Then he decreed the city to be steady, divided its shops and deposited in it eleven treasury houses full of jewels of various colours. He extended its streets and made pass its ways and opened gates as passways for its inhabitants. He made springs flow out of it and dug rivers into it, brooks flowing differently. He opened twelve gates to its walls making entrances to its gardens. He built well this city by the hands of eight craftsmen co-operating with each other. They are the servants of the city. He put five watchmen to guard it in order to conserve its pillars. Then he elevated this city in the air on two columns and made it move to six directions with two wings. After that he settled there three tribes which are its inhabitants: jinns, humans and angels, and appointed as their chief one king and commanded him to preserve it and admonished him to rule it. (al-Qazwini (a): )

After this account follows the explanation for the analogy:

The nine substances are bone, marrow, nerves, veins, blood, flesh, skin, nail and hair. The ten layers are head, neck, breast, stomach, thorax, groins, hips, thighs, legs and feet. The pillars are bones, and the ties are sinews. The eleven storehouses are brain, spinal marrow, lungs, heart, liver, spleen, gall bladder, stomach, intestines, kidneys and testicles. The roads and the streets are arteries and the rivers are jugular veins. The twelve doors are eyes, ears, nostrils, nipples, apertures in the private parts of the body, mouth and navel. The eight craftsmen are attraction, retention, nutrition, excretion, digestion, growth, reproduction and production. The five guardians are the five senses: hearing, sight, touch, taste and smell. The columns are legs and the wings are hands and the six directions are what is well known. The three tribes are three souls: the desire soul is like the jinns, the animal soul is like the men and the speech is like the angels. The one king is the intellect. (al-Qazwini (a): –)

The “wise men” refers most likely to the Ikhwan, since the resemblance between al-Qazwini’s comparison and the comparison of the Ikhwan in the epistle On the Structure of the Body (R II: –) is evident – there are only some minor differences between them. These kinds of quotations of earlier sources are, however,

nothing exceptional: in .aja.ib-literature, like in many other mediaeval literary genres, it is common to quote other authors without references. It cannot, though, be excluded that the two works may also be citing a common source.

### Al-Qazwini

borrowes the comparison appearing also in the Rasa.il so literally that, for instance, its listing of the materials of the human body differs from his own view presented in the same chapter immediately before the comparison. Instead of the eleven materials he introduces, in the comparisons these are said to be nine, which is in accordance with the comparison of the Ikhwan.

The way of describing the appearance of the correspondences in the process of making the human being or the city resembles the mythological idea of the microcosm-

macrocosm analogy as something connected with the process of the creation in accordance with the bodily form of the primordial human being or a deity. Another detail, which also reminds one of the mythological creation narrative, is the posture of the human being, which with his “two wings” resembles the Iranian Gayomart, who is described by Widengren (: ) as standing with his “arms outstretched as one crucified”. On the other hand, this also brings to mind an angel, which would be a rather surprising element in this kind of physiological comparison or microcosmism of the Ikhwan in general. In the Rasa.il, angels are not presented as microcosms. In the light of Suhrawardi’s human archetype also known as Gabriel (see ..), this would not, however, be totally absurd.

Though city-state comparisons would at first glance hint at Greek philosophical sources, comparisons between man and the city are not excluded from mythological tradition either and the sociological aspect is also present in them. Widengren (: ) refers to a comparison in the Zoroastrian Shkand Gumanik Vichar between the body parts of the human being and the four classes of men: the head represents the priesthood, the hands the class of warriors, the belly husbandmen and the feet artisans. Even if the three tribes in the Ikhwan’s and alQazwini’s comparison arguably stand in a different position from the classes of men in the Zoroastrian comparison, they also bring a touch of the sociological aspect to the comparison.

Despite the obvious similarities between the comparisons, there are some minor differences between al-Qazwini’s and Ikhwan’s accounts. These may either simply be due to the differences between Bu.rus al-Bustani’s edition and the supposed manuscript used by the author of the .Aja’ib or reflect differences in the views of the authors. One of them is the absence of the bodily humours in the



comparison of al-Qazwini. As for the Ikhwan, the humoral theory is essential, also appearing several times in the context of microcosmism (see ..). Another is that the Ikhwan mention seven craftsmen while al-Qazwini makes them eight. If this is an intentional modification, it can be explained in two ways. Firstly, a possible reason for this are the differences in their views concerning the spiritual faculties of man (see ...). Secondly, it can be explained by the meaning given to numbers in the Rasa'il. For al-Qazwini, numbers do not play any significant role in his thought, while for the Ikhwan numbers used in comparisons are never haphazard and the same numbers occur again and again in them: seven is an often occurring number, whereas eight – in spite of its uniqueness in numerology – appears only rarely.

In general the meaning given to certain numbers in the Rasa'il is reflected in the idea of man and in microcosmism as well, and they are strongly present in explicit comparisons especially in their physiological form. Among important numbers in the comparisons of the Rasa'il are seven, nine and twenty-eight. These are found at all layers of reality and the structure of the human body as well as the faculties of the soul acting in it are always quantitatively defined in the frames of these numbers. It seems that the recurrence of these numbers in the microcosm-macrocosm comparisons is not primarily due to their numerological value, because in the 1<sup>st</sup> and 2<sup>nd</sup> epistles, where the Pythagorean numerology is treated, these particular numbers receive little attention – except for number nine, whose uniqueness is treated extensively in the 2<sup>nd</sup> epistle (R III: 1). In their treatment of the uniqueness and cosmological meaning of numbers, the authors seem to be most interested in such numbers as two, four, five, six and nine. Seven, for instance, does not receive much interest: indeed in the 2<sup>nd</sup> epistle its special features are not treated at all. More than for their numerological value, seven, nine and twenty-eight seem to have been selected for their astronomical role as the numbers, respectively, of the planets, spheres and mansions of the moon. Twenty-eight is additionally granted a special position for being the number of Arabic letters.

In addition to these astronomically essential numbers, among the most important numbers appearing in the comparisons of the Rasa'il is undoubtedly four, which is an obvious choice for various reasons. Four elements and their appearance in the human body are naturally a basis for the ontology of the Ikhwan and for the mediaeval worldview in general. The uniqueness of number four in the human body will be examined in more detail below and it will be seen that the fourfold division of the human being also appears in the context of the microcosmic idea in other texts of the study corpus (see ..).

Number eight in al-Qazwini's comparison presented above, is, however, an interesting number from the perspective of the comparisons in the *Rasa'il*. In the 3rd epistle (R III: 1), where the speciality of many other numbers is treated extensively, number eight is not treated at all, and there is only a reference to the epistle on music. In it, eight is explained to have a special role, for instance, for being ratio defining diameters of the spheres. A special characteristic attached to number eight is also its mathematical relationship with four. (W: 10) Nevertheless, in the explicit comparisons of the *Ikhwan* eight occurs very rarely.

A comparison which cannot be counted among the comparisons which were influenced by earlier mythological tradition, but is connected with the Islamic religious tradition as well as with numbers, is the one the *Ikhwan* present in their last epistle of the second part on the natural sciences (R III: 10). In it, the Arabic alphabet is paralleled at the same time with the world as a whole and with the human body. Just as the Arabic alphabet is the most perfect and eloquent among alphabets, the human body is the most perfect among animals. The number of alphabets appears at the level of the universe in the mansions of the moon and it is said that in the human body one can find members "resembling these numbers". At the beginning of the passage, the first four letters (alif, ba., ta. and tha.) are explained to be the roots for everything comprising all beings and corresponding to numbers in the same position, which are elsewhere mentioned to be 1, 2, 3, and 4 (see, e.g., R I: 10). Numbers are also often paralleled with the first levels of emanation (see 1.1). Alif is described as the Intellect and ba. as the Soul. In the sublunar world, the shape of the human body, on account of its upright posture, is said to be like alif, while "animal forms resemble a curved line", meaning the curve of the second (as well as the third and the fourth) letter. This – perhaps somewhat clumsy – comparison brings the alphabets of the holy language to the manifold system of the microcosm-macrocosm analogies.

### 1.2 Astrology in Physiological Comparisons

In addition to its mythological impact, the Hermetic influence cannot be excluded in the explicit physiological comparisons. Marquet (1977: 10) points out that in the case of the *Ikhwan*, the interest in anatomical microcosm-macrocosm comparisons might have its origins in such Hermetic sources as *Kitab al-usul*. The comparison of the *Ikhwan* presented above concerning the correspondence between the human body and the earth has elements which appear in the Hermetic tradition as well, like crying being related to rain. Also comparisons between the human head and the heavenly spheres, which can be found in the *Sirr* and the *Ghaya*, resemble those in Hermetic sources. In addition to these individual comparisons, probably the most obvious Hermetic feature in the physiological comparisons is the presence of astrology. When it comes to physiological comparisons,

the heavenly spheres take the role of the macrocosm more often than the city-state, which is the most common macrocosm in the comparisons concentrating on the human soul.

Most of the correspondences found between the human body and the heavenly spheres are structural. In the 11th epistle (R II: 11), the Ikhwan describe a correspondence between the different layers of the spheres and the materials of the human body, both nine in number. The layers of the spheres and the materials of the human body are found to be similar in the way they are entwined together: “The nine spheres are combined one around the other. In a similar manner, the nine materials of the human body are entwined one around the other.” These nine materials of the body are bone, the cerebrum, flesh, veins, blood, nerves, skin, hair and nail. In the Ghaya (11), the same idea appears with some differences in materials: the outmost sphere is said to be al-mu.i., whose parallel in the human body is void, and only eight materials are listed excluding blood and vessels from the Ikhwan’s list and including muscles.

Later in the same subsection of the Rasa.il (R II: 12), the mansions of the celestial bodies are said to be related to the apertures of the body: the eyes to the mansion of Jupiter, the ears to that of Mercury, the nostrils and the breasts to that of Venus, apertures of the private parts to the mansion of Saturn. The mouth corresponds to the mansion of the Sun and the navel to that of the Moon, because the navel is the entrance of alimentation before birth and the mouth afterwards. The apertures of the private parts are said to be connected to them, just as the house of Saturn meets the Sun and the Moon.

Sometimes activities of the human body are among the compared features. The author of the Ghaya lists correspondences between the human body and the universe in the following way: “Man’s walking is like the movement of the planets and his sitting like their halting. His movement backwards is like the decline of the planets and his death like their burning.” (Ghaya: 12) In the Rasa.il, a similar passage goes into more detail in paralleling the human activities with astronomical phenomena:

His movements and acts are like the movements and rotation of the heavenly bodies. His birth and presence are like ascendants and his death and absence like descendants. When his affairs and states are right, it is like the rectitude of the heavenly bodies. His staying away and fleeing is like their return. His illness and weakness are like their burning; his halting and bewilderment are like their halting. The elevation of his position and his eminence are like the rise of a planet to its apogee and his descending in

his position and his lowness are like a planet's descent to its perigee. His getting together with his women is like conjunction. His communication is like the appulse of the heavenly bodies and his separation is like their moving further away. (R II: )

In these comparisons, it is often hard to say whether the purpose is to describe astronomical details or the human body. The same applies to a comparison of the Ikhwan (R II: ) between the nodes and the bodily humours: the happiness and misfortune of the celestial bodies is said to be dependent on the nodes, which in the Rasa'il are known as the head and the tail. They are described to be hidden in their nature, but perceivable in their effects. In the human body, the humours are said to have a similar position: their balance and natures influence the acts of the intellectual faculty and the faculty of speech. Similarly, the Sun and the Moon cannot avoid the influence of the nodes. This same idea is mentioned in one sentence in the Ghaya (). In these comparisons, the holistic way of binding together the spiritual and material well-being of man – and in the universe as a whole – is emphasized, which is an essential feature of the humoral theory.

As noted previously, there are certain numbers which often occur in physiological comparisons. Sometimes the whole motivation for the analogy seems to be to emphasize the importance of these numbers. In the 3<sup>rd</sup> epistle (R III: ), for example, the Ikhwan mention that number twelve is the number of the apertures of the human body as well as that of its members. A typical example of microcosmic comparisons emphasizing certain numbers can also be found in the Ghaya in a passage in which numbers occurring in the heavenly order are related to the bodily structure:

The seven inner organs are like the seven heavenly bodies and in his head are seven bones like the number of the seven weekdays. In his back, he has vertebrae like the number of the hours of the night and day and joints like the number of the mansions of the Moon and the letters of the alphabet. In his stomach, there are as many intestines as the number of days of the new moon. In him, there are pulsating arteries and an equal number of motionless ones like the days and nights of the year and the number of degrees. He has the same number of natures as there are seasons in a year. (Ghaya: )

Another analogy in the Rasa'il (R II: –) obviously highlighting numbers is a comparison between the twelve apertures of the human body, which are said to correspond to the zodiacal signs. The only explanation given for this parallelism, apart from the number, is that just as in the human body the apertures are divided into the left and right side of the body, so some of the signs are southern and some northern. Exactly the same idea occurs in the Ghaya, with the repetition of the statement often appearing in the comparisons of the Ikhwan as well that the

similarity is not only quantitative, but also qualitative. Nevertheless, the qualitative nature of correspondences is not always as clear for the reader as it is claimed to be for the author, and, at times, the primary reason for choosing the entities for comparison seems to be quantitative.

All these physiological comparisons fit well to Allers's structural microcosmism. They concern relationships appearing in the human body and the correspondence between the microcosm and macrocosm concerns the structure the parts of the two entities form. In some forms presented above – especially in the ones examining the locations of the faculties of the human soul – some features of the body with the signs of the zodiac, the faculties of man with the heavenly bodies and the letters with the mansions of the moon.

holistic microcosmism can also be perceived, but the main emphasis is on straightforward structural analysis.

It is hardly possible to find any particular reason for the use of the explicit physiological comparisons, but it seems that there are two main concentrations in the analogies, which often appear in accordance with the macrocosm to which man is being compared. The physiological comparisons examining the human being as a reproduction of a city (or, at times, a house) concentrate on describing the human body and, especially, the structures and hierarchies appearing in it. Contrarily, the comparisons concerning the heavenly spheres could be seen as descriptions which, instead of describing the human being in terms of the cosmos, intend to reveal – vice versa – something of the universe in terms of man. This latter point has already been affirmed by Conger:

It should be noted also that the Brethren have something more than a mere mention of the universe as a 'large man.' Most of the authors have estimated man in terms of the universe, but have not gone far in describing the universe in terms of man; even where the two have been set in parallel, the direction of emphasis has been chiefly toward man rather than away from him. (Conger : )

At times physiological comparisons seem to work simply as a stylistic feature of the texts or, as was seen, for phrasing such particular things as the nobility of certain numbers. Some of them, however, clearly intend to describe some particular aspects of the idea of man. This is the case with the comparisons scrutinizing the hierarchies appearing in the human body. They work as expressions of the views concerning the importance of the different inner organs and partly also of the details of their functions. Through comparisons the twofold nature of the human

being and the co-operation between these aspects is also expressed.

Sometimes the metaphysical meaning given to the comparisons may become evident only in the light of the general scientific worldview. Scientific theories may appear only as references in comparisons. An example of this can be seen when comparing the details of the comparisons in two encyclopaedic works: one difference between the comparison in the *Rasa.il* and that of the *.Aja.ib* is the reference to the bodily humours – an element which occurs in the comparison of the *Ikhwan*, but is absent in al-Qazwini's comparison. Sometimes the meaning of a comparison is connected with a scientific view. As we saw in the last examples, physiological comparisons may work as expressions of a commitment to astrological theory. Then their purpose may also be to draw attention to the dependence of the human body, its actions and – on a more concrete level which is not explicitly present in the texts – its health on the heavenly bodies.

## . SCIENTIFIC WORLDVIEW AND PHYSIOLOGICAL MICROCOSM

In many texts, the human body is presented as a microcosm in implicit forms, often as part of the scientific worldview. In the mediaeval Islamic context, the definition of science differed from modern definitions. The microcosmic idea is particularly relevant in such disciplines as alchemy and astrology, which are nowadays regarded as “pseudo-scientific” or “semi-scientific” fields. In mediaeval times, however, these disciplines were sometimes classified as branches of the natural or mathematical sciences, and sometimes listed under the categories of magic or occult sciences. In the following subsections, I will examine the relevance of the idea of the human being as a microcosm in the context of four separate branches of science: astronomical sciences, physiognomy, alchemy, and, lastly, the theory of the bodily humours as it appears in music therapy. In addition to examining the microcosm-macrocosm analogy as part of the theory of these sciences, I will give some general frames of their position among Islamic sciences and possible influences in later scientific tradition. I do this in order to define the role of microcosmism in the scientific worldview more generally. In some cases, as will be seen, also the explicit comparisons presented above seem to have more philosophical significance when they are examined in the framework of these theories.

### .. Astronomical Disciplines

I will examine astronomical views and microcosmism in two contexts. Firstly, the idea will be examined in the context of astrology. Astrology has a prominent role in various fields treated in the *Rasa.il* and it is in many ways closely connect For example, al-Ghazali in his *Tahafut al-falasifa* (al-Ghazali (e): ) includes both alchemy and astrology in the natural sciences. In the *Rasa.il* as well, alchemy is treated as a

natural science, while astrology forms part of astronomy. Some, like al-Farabi, in his I..a.

al-ulum, however, exclude alchemy from their classifications. For more on the classification of sciences in the mediaeval Islamic world, see, e.g., Nasr : –.

ed with microcosmism. The basic idea is found summarized in the epistle on magic (R IV: ): “all that happens in the world of man and in the created earth is under the rule of the spheres and the command of the heavens.” Astrological embryology

is chosen as an example of the astrological sciences, because the Ikhwan were essential in the later development and diffusion of the theory. Further, a more mathematical dimension of astronomy will be approached and the focus will be on the aesthetic theory of human proportions, which were thought to reflect heavenly proportions. The appearance of the latter in the Rasa.il is, to my knowledge, unique in Islamic thought and, for this reason, I will examine its possible influence in later aesthetics in more detail.

### ... Astrological Embryology

In mediaeval Islamic thought, astrological theory was seen as having an influence already in the first steps of the development of a human individual. By astrological embryology, I mean the idea that the development of an embryo in each month of pregnancy is subject to the influence of one of the heavenly bodies. This was important especially in astrological writings and philosophy, but it also appears in some mainstream medical works. Astrological embryology is clearly connected with the microcosm-macrocosm analogy, particularly in its physiological aspect.

Although some sources for Islamic astrological embryology can, according to Widengren (: ), be found in Indo-Iranian cosmological writings, the first complete presentations of the theory are assumed to appear in the mediaeval Islamic intellectual tradition. According to Burnett (: –), apart from some brief references, astrological embryology is not treated in Antiquity. Embryology is studied in ancient sources as well, but its premises are different from those in the Islamic era. It is, for instance, already considered a fact in the ancient sources that the embryo born in its seventh month may survive, while one born during the eighth month of pregnancy does not usually survive. Burnett (: –) points out that in Antiquity this was explained by the numerological uniqueness of number seven. Numerological explanation was replaced in Islamic Hermetic texts by astrological theory.

The theory appears in its complete form in such early Arabic Hermetic texts

as Kitab al-i.tama.is and Sirr al-khaliqa. In addition to these two works, Burnett (: –) mentions the Rasa.il among the early sources for astrological embryology in the Islamic tradition. The Rasa.il was influenced by earlier works and, through it, the theory was transmitted to later astrological tradition and subsequently to medical writings. One of the background views for the relationship between the development of the human embryo and heavenly spheres can, according to Burnett, be found in the description of Adam’s creation in Kitab al-i.tama.is; here it is said that the planetary powers, from the moon to Saturn, create the “bodily souls” of the human being: bone soul, sinew soul, flesh soul, marrow soul, blood soul, skin soul and hair soul. In the same work, the spiritual powers of the planets are also aligned with the substances of the human body in the following order: hair with Saturn, blood with Jupiter and Mars, fat with the Sun, saliva with Mercury and the brain-matter with the Moon.

In later Islamic thought, astrological embryology plays an important role in texts influenced by the Hermetic tradition, but it is not alien to mainstream scientists either. Baffioni () compares the embryological views appearing in the Sirr, the Rasa.il and two tenth-century medical texts, al-Qur.ubi’s Kitab khalq aljanin wa tadbir al-.abala wa.l-mawludin and al-Majusi’s Kitab kamil a.-.ina.a a.-.ibbiya. She indicates that, in the medical texts, astrological embryology is contrasted with scientific views, while in the other two the astrological interpretation of the theory forms part of the prevailing worldview.

I will examine the appearance of the theory in four texts: the Sirr, the Rasa.il, al-Qazwini’s .Aja.ib and in .usi’s Raw.a. As noted above, Baffioni () has studied the relation between the Sirr and the Rasa.il. It has previously been acknowledged by Widengren (: ) that the Rasa.il is a possible source for the embryology of al-Qazwini. I agree with Burnett (: ) that astrological embryology stands in a salient role in the system of the Sirr, where the treatment of the theory is located at the end of the work (–, VI .–.) forming its climax. References to it appear elsewhere in the work as well. In the Rasa.il, astrological embryology is referred to in many contexts (e.g., W: ), but the th epistle (R II: –) is dedicated to this topic. Al-Qazwini ((a): –) reserves some pages for it in the chapter on the human being, and .usi (–) handles it as part of his description of the human body.

The origin of the human being in a drop (nu.fa) appears as a starting point in all treatments of astrological embryology. According to Widengren (: –), this was already present in the Indo-Iranian tradition. He connects it closely with the microcosm-macrocosm analogy, claiming that “further evidence in Iranian speculation about the remarkable correspondence between earth as macrocosmos



and man as microcosmos lies in the fact that both were created from water.”

Though the origin of everything in a drop is mentioned, for instance, in the *Sirr* (, V.), the origin of specifically the human being in a drop is of more interest to my study. The latter is also mentioned in the *Qur.an*. Hence, the drop is referred to by many who do not go into the details of astrological embryology (e.g., al-Ghazali (f): ). In the texts developing the theory of astrological embryology, references to the drop also appear more often than other ideas of embryological theory: it is mentioned several times in the *Sirr* (e.g., , VI.) as well as in the *Rasa.il* (e.g., R III: , IV: ), in which it also occurs in the context of microcosmism in the epistle *On the Saying of the Wise that the World is a Large Man* (III: ).

The nature of the drop is discussed in more detail in some passages on embryology. The *Rasa.il* says that at the beginning it is a drop of sperm surrounded by menstrual blood and when the heat of the sperm is mixed with the moisture of blood it turns into a foetus (.alaqa). Baffioni (a: ) remarks that the authors of the *Rasa.il* abandon the Hippocratic notion of female sperm forming the embryo when it mixes with male sperm, adopting instead the Aristotelian doctrine, which replaces female sperm with menstrual blood. In the .*Aja.ib* (alQazwini (a): ), however, we can find this again, and al-Qazwini says that female and male sperm are mixed together. There is a difference between these views, for instance, as to what extent the drop includes the form of the future embryo. As Baffioni (: ) points out, a difference between the *Ikhwan* and the *Sirr* is that, according to the author of the *Sirr* (, VI.), “in the nu.fa of the human being, there is the whole shape (shakl) and the whole form (.ura) of the human being.” Hence, if there are defects in the newborn, these are already present in the nu.fa. This idea cannot be found in the *Rasa.il*.

During the first month of pregnancy, the foetus is under the influence of Saturn. The author of the *Sirr* says that the eyes, mouth and ears are formed in the second month, which falls under the dominance of Jupiter. In the *Rasa.il* and the *Raw.a*, this is said to take place much later (in the fifth month). These texts also claim that the foetus (.alaqa) transforms into the embryo (mu.gha) during the third month, under the influence of Mars.

According to all of these authors, the fourth month is an essential period in the formation of the embryo. This is the time when “life starts to get apparent from inside to outside,” as the author of the *Sirr* (, VI.) puts it. The *Rasa.il* and .*usi* say that the animal spirit (ar-ru. al-ayawani) starts to work in the embryo under the influence of the Sun and then an important development in the bodily structure takes place. In the *Sirr*, it is said that the Sun makes the embryo much

more active in its movements than at earlier stages.

In all of these texts, the fifth month (of Venus) is connected with structural development; the body parts are said to take their form during this month. The Sirr explains that bones then become apparent and the material of the brain starts to develop. Veins are also assumed to develop under the influence of Venus, but the Rasa.il claims that this has already happened under the influence of the Sun. The opening of the apertures of the eyes, nostrils and ears during the fifth month is described in exactly the same manner by the Rasa.il and .usi. In the Rasa.il, it is added that at this stage the masculine embryo starts to resemble his mother and the feminine embryo her father.

In the sixth month of pregnancy, the embryo enters the influence of Mercury; all authors interpret this to mean an increase in its movement. The authors of the Rasa.il remark that the embryo starts to sense its whereabouts, is able to open its mouth, and can sniff with its nose and move its tongue and lips. Sometimes it sleeps, sometimes it is awake. All these details appear in the Raw.a as well.

According to all of these texts, the body of the embryo achieves its completion in the seventh month, and, if the baby is born during this month under the lunar influence, it may survive. After completing the cycle of the seven planets, the embryo re-enters the influence of Saturn in its eighth month. In the eighth month, again following the views presented in the Rasa.il, .usi (, trans. Badakhchani) specifies that: “such a heaviness and gravity appears (in the embryo) that if it is born in this month it usually will not survive, because the eighth month is that of the house of Pisces, and Saturn in this position reduces all powers by its coldness and dryness, and (the embryo) will die.” In the ninth month, however, the astrological circumstances are again more beneficial when Jupiter begins to dominate.

Even in this general overview, we can see that the differences between the texts are small and the basic elements of embryological theory recur in all of them. The Rasa.il and the Raw.a resemble each other in particular in relation to specifics, although the Rasa.il treats the topic in a more exhaustive manner. Tracing more detailed influences between the texts would, however, require a pro-founder analysis.

Astrological embryology per se is an example of the analogy between the various layers of reality and, for this reason, has relevance for the microcosm-macrocosm analogy and its role in the idea of man. No explicit references to the microcosm-macrocosm analogy appear in the texts’ treatment of astrological embryology.

In the *Rasa.il*, the epistle on embryology precedes the one on the human being as a microcosm. If the work is examined as a whole, it is thus closely connected with explicit microcosmism. All the other texts – the *Sirr*, the *.Aja.ib* and the *Raw.a* – also employ microcosmism in its other forms. This does not mean that the authors would necessarily consider astrological embryology to have anything to do with the other forms of the analogy, but it indicates that astrological embryology forms part of this idea of man.

When it comes to Allers's classification of microcosmism, astrological views can usually be seen as forms of structural analogy. This also seems to be the case in the theory of astrological embryology: the whole analogy is based on correspondences between the human realm – in this case in the development of the human embryo – and the heavenly bodies. The correspondences between these levels examined by embryologists also relate to the dependence of the lower on the higher; in this way, man is seen to be subordinate to the cosmic laws.

... Aesthetics

The second theme concerning the heavenly spheres and the human physiology is about the human body as an ideal of beauty. What makes the human body exemplary is the perfect harmony of its mathematical proportions. In the *Rasa.il*, the excellent proportions (*an-nisba al-fa.ila*) and their harmonic combinations are said to form an ideal in many activities of the human being, including various artistic disciplines. In this, the *Ikhwan* follow their times – mathematical proportions were accepted as an important factor defining beauty in mediaeval Islamic thought. According to Doris Behrens-Abouseif:

The Arabs inherited from the Greeks the doctrine that proportion was the basis of beauty.

This principle was adopted in all periods and in the context of various disciplines, in particular in the arts of calligraphy and music. The doctrine of proportion allowed the formulation of universal aesthetic statements applicable to all arts as well as to human beauty. (Behrens-Abouseif : )

In their epistle on music, the *Ikhwan* produce a particularly detailed analysis of proportionality. For the *Ikhwan* (W: –), the ideal mathematical proportions consist of ratios  $\frac{1}{2}$ ,  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{4}{5}$  and  $\frac{5}{6}$ , which, according to them, are based on the diameters of the heavenly spheres (illustrated by Wright : ). These proportions are explained to appear not only in mundane music, which imitates the sounds produced by the movements of the heavenly spheres, but also at other layers of reality. Their appearance has been explained in detail in calligraphy and in human physiology.

The particular interest of the Ikhwan in the bodily aspect of man and its connection with the heavenly spheres can be seen in their detailed description of human measurements. The exact information about the ideal proportions of the human body is given by describing the ratio of a newborn baby's span with its body

(W: – and Wright's illustration, : ). The Ikhwan connect the notion of the human body as the perfect shape with religious sources, and in the context of the description of human measurements (W: ), there are two references to the Qur'an: "We indeed created man in the fairest stature" (:) and he "who created thee and shaped thee and wrought thee in symmetry and composed thee after what form he would" (:–).

Although the human physiology is examined in detail and the whole treatment of it lays emphasis on the exceptionality of the human form, the Ikhwan mention that proportionality is not a unique characteristic of the human body, but also appears in the bodies of other .ayawan:

According to this model, and by analogy, the anatomical structure of all animals will be found to be proportionate; the parts of every form of every species (are proportionate) to its body as a whole and proportionate to each other, either quantitatively, qualitatively, or both, being in no way deficient if they are unaffected by the harm that may come to them at conception and during gestation from defects of the humours, alterations of temperament, and inauspicious astrological conjunctions. (W: , trans. Wright, in W: )

Descriptions of human proportions have been familiar in various traditions throughout intellectual history. Even so, the listing of the Ikhwan is, to my knowledge, unique in the Islamic tradition. Proportions given in the Rasa.il resemble their predecessors in Antiquity and the mediaeval European canons of human proportions (Shiloah : –). Although the treatise of the Ikhwan is more detailed and differs in some of its features from Leonardo da Vinci's Vitruvian man, the similarity between these two passages on human measurements is, as Wright (: ) remarks, "inescapable, and is not just an unavoidable consequence of a common anatomy: there is a direct echo of the Vitruvius's circle, centred upon the navel, that touches the outstretched fingers and toes, and of the square within which height equals extended arms."

Erwin Panofsky (: ) notes, however, two unique characteristics in the description of the Ikhwan. One is the use of span as a measurement. In declarations of the human proportions, the unit of measurement is usually the length of the face or nose. Another, and more significant, factor, which distinguishes the

Ikhwan from other theorists of human measurements, is that the proportions are described for the body of a newborn. This is, according to Panofsky, done in order to emphasize the cosmological importance of the theory. In the epistle on music, the child is said to emerge from the womb in the perfect form. A reference to the perfect shape of a baby also appears in the philosophical sayings on music: “A demonstration of that is the fact that newly born young are more finely structured and elegant in form and appearance because of their proximity in time to the completion of the Creator’s work on them” (W: –, trans. Wright, in W: ).

The same is said to apply to flowers, which are more beautiful when they are fresh.

The nature of the epistle on music also implies that the primary motivation for the examination of the human measurements in the *Rasa* is cosmological. The proportions are a manifestation of cosmic harmony, which is summarized in the human body. Although microcosmism is not explicitly present in this context, the human body as a replica of the mathematical ratios following the heavenly order refers to the human body as a microcosm, which is a representation of the ideal order. This brings the microcosm-macrocosm analogy into aesthetic discussion. In, for instance, the philosophy of Antiquity, not to mention Renaissance thinkers, this is not exceptional. In the Islamic discussion on aesthetics, however, the human being as a microcosm has not received much attention and it seems that this dimension was more extensively elaborated solely by the Ikhwan.

The practical role of the theory cannot be entirely excluded either. After defining the proportions of the baby, the Ikhwan (R I: ) declare: “These correspondences and analogies are the ones, according to which the skilled artisans make their works, sculptures, figures or paintings, well-proportioned in their structure, combinations and harmony.” The proportions form an ideal to be imitated in various other fields as well. According to the Ikhwan, the right proportions are needed in medicines and cooking as well as for the goodness of human character. In addition, examples of right proportions are manifested in the harmony of music and beautiful paintings. A talented painter has to follow the balance of colours otherwise he produces nothing but ugliness. In addition to the epistle on music, the science of the proportions (*ma.rifat/ilm an-nasab*) is examined in the sixth epistle (I: ), where it is considered from the perspective of music, arts, medicine and cooking.

Even though the Ikhwan themselves seem to have intended the definition of human proportions to serve also as a pragmatic tool in the creative work of an artist, this was hardly the case in practice. According to Priscilla Soucek (: ), there is no evidence of any practical value of the Ikhwan’s canon in Islamic art. In the history of art, such canons have usually been used when defining the

portrayal of the human body in the arts. The canons were widely employed in ancient art as well as in the Western tradition until the 19th century, when art was significantly transformed and began to move in the direction of subjective expression (Panofsky : –). The lack of any practical influence of the Ikhwan's canon is, however, difficult to prove because of the lack of material on ideals of painting in the Islamic culture. A similar problem is confronted when the practical value of human proportions is examined from the perspective of Islamic architecture. There are few sources for Islamic mediaeval architectural ideals: most of the writings on architecture treat only the technical aspects of building.

In bringing together the cosmological and practical dimensions in their representation of human proportions, the Ikhwan were ahead of their time. According to Panofsky (: –), during the Middle Ages the practical canons were usually separated from those with cosmological significance. This changed in the early Renaissance, when the new humanists combined the two aspects of the Vitruvian man and attached the mystical significance of cosmic harmony to the artistic ideal. That is to say, the rational, Aristotelian theory was combined with the mystical, Platonic interpretation of the topic.

When it comes to the canons of the proportions of the human body, no – direct or indirect – influence between the Rasa'il and the Renaissance aesthetics has been proved. Nonetheless, when it comes to proportionality as a criterion for beauty in general, the Islamic theorists of beauty are acknowledged to have been involved in the development which led to the European Renaissance. Panofsky (: n. ) points out that there is reason to assume that one of the earliest post-classicist Italian artists, Lorenzo Ghiberti (d. ), adopted the importance of proportionality as an essential criterion for beauty from the writings of Ibn al-Haytham (d. ).

It has been argued that Ibn al-Haytham was the first mediaeval thinker to define beauty as a category on its own, independent of ethics, logic or theology. Consequently, his definition of beauty has been characterized as an antecedent for modern aesthetics. (Gonzalez : ) In Kitab al-manazir (–), Ibn al-Haytham defines the properties of the object perceived by the sense of sight as producing a feeling of beauty in the soul of the perceiver. On some occasions, colours cause objects to be considered beautiful, as when one observes flowers. On the other hand, the moon looks more beautiful than the smaller heavenly bodies, because size is one of the properties causing beauty. After defining twenty properties of this kind, Ibn al-Haytham mentions proportionality (al-tanasub) and harmony (al-i'tilaf) as a separate category. In order for an eye to perceive beauty in calligraphy or in any object consisting of different parts, harmonic proportionality is demanded. The proportionality of an object produces beauty distinct from

the beauty produced by any other property causing beauty. The human body is one of the examples Ibn al-Haytham brings up of the objects which proportionality makes look beautiful. In a beautiful man, the paired body parts, for example, should correlate with each other in size: thus thin lips are more beautiful for a small-mouthed person.

In *Kitab al-manazir*, the terminology and the general emphasis are very different from that of the *Ikhwan* and the cosmological dimension of the proportionality as a criterion of beauty is completely absent. Like in the *Rasa'il*, Ibn al-Haytham expresses interest in the human body and its proportionality and uses calligraphy as an example like the *Ikhwan* also do. For the *Ikhwan* the aesthetic ideal, as well as their view of the human body and its measurements, are very clearly cosmological, while Ibn al-Haytham takes part in the discussion primarily from the perspective of the natural sciences. However, these two passages, quite rare of their kind in Islamic thought, stand as examples of the expression of the aesthetic ideal and its attachment with the idea of man.

The explicit comparisons give an interesting perspective on the proportionality of the human body as a criterion for beauty. Since the *Ikhwan* do not refer to the human measurements in the epistles dedicated to microcosmism, nor do they use comparisons in the epistle on music, finding connections between the two has to be based on delicate guesses. Considering explicit comparisons as expressions of the aesthetic ideal might be an over-interpretation. The notion of the human body as an ideal in architecture might have been familiar to the authors of the *Rasa'il*. Since, in the previous traditions, the presentation of a house as a macrocosm is not even nearly as usual as a city-state or the heavenly spheres, earlier architectural texts might have encouraged them to use the analogy between the human body and a house. This, however, does not mean that the *Ikhwan* would have given these comparisons similar meaning as the authors of the architectural texts did.

One particular comparison is interesting from this perspective. In both Indian and Iranian creation myths, there are allusions to the primordial man, who stands in a posture of someone crucified and whose extended arms are equal in length to the length of his body from head to toe (Widengren : ). In a comparison between the human body and a city presented above in this chapter (see ..), the *Ikhwan* describe the human being standing in this posture, but nothing is said about the measurements of the body in this context. Naturally, the measurements mentioned in the myth are in accordance with the reality as well as with the previous Greek canons of human measurements and, hence, the *Ikhwan* would not have needed this source to end up at this conclusion in their description of human measurements. Nevertheless, taking into account that the Indo-Iranian influence is

well proved by Widengren in the microcosm-macrocosm analogy of the Ikhwan, it is possible that the reference to the measurements of the human body in those mythological sources worked as an inspiration for the Ikhwan to provide a detailed listing of these measurements. This would also explain the cosmological emphasis in the examination of the human measurements of the Ikhwan.

## .. Physiognomy

Physiognomy (*firasa*) is another field which brings together aesthetics and the human body. In physiognomy, as it appears in the Islamic mediaeval context, it is assumed that by examining the physical appearance of a human being his character or spiritual virtue can be revealed. The inner qualities of the human being were thought to be manifested in the outer features, and the changes and development of the soul were expected to become visible in physical appearance. In itself, physiognomy does not have much to do with the microcosm-macrocosm analogy. Physiognomic speculation has been related to it, for instance, when it appears to be attached to astrology. Nonetheless, this is not the case in any of the studied texts. Ibn .Arabi, however, reserves the whole eighth chapter of the *Tadbirat* (Ibn .Arabi: –) to open up the secrets of physiognomy and connects the theory with the idea of man as the microcosm.

The position of physiognomy among Islamic sciences was not clear. It is not mentioned in most of the classifications of the sciences, and some authors place it among divinatory and occult sciences. In its most classical sense – as the interpretation of personal characteristics from some immutable bodily features – physiognomy usually appears in medical literature. Like their Greek predecessors, Islamic sages did connect the theory of the bodily humours with physiognomy, but in the Islamic tradition physiognomy was also employed outside the sphere of medicine. Religious and mystical meaning is emphasized in Islamic interpretations of the field. Physiognomy was thought to be facilitated by God and practising it was attributed to pious persons. Hence, stories of physiognomic capacities are often attached to well-known Sufis. Sufis, in particular, highly valued physiognomy and al-Qushayri describes physiognomy in his *Epistle* as “the emanation of light illuminating the heart”. In its broadest sense, the discipline can be understood as interpreting something inner from the outer aspect of the thing, and, for this, as Hoyland points out, such concepts as *ahir* and *ba'in* were of importance in physiognomic speculation. (Hoyland : –)

The eighth chapter of the *Tadbirat* is entitled *On the Religious and Intellectual Physiognomy* (*Fi al-firasa ash-shar.iyya wa-l-ikmiyya*) and at the beginning the field is described as “God’s generosity to you, lightened with the divine lights” (). The title of the chapter already lays emphasis on Ibn .Arabi’s twofold understanding of physiognomy: its traditional branch is referred to as intellectual



physiognomy (al-firasa al-ikmiyya) and distinguished from that connected to religious law (al-firasa ash-shar'iyya).

The first part of the chapter (Ibn .Arabi: —) is dedicated to the field as it is understood by sages, i.e. intellectual physiognomy. He explains how the inner virtues are reflected in the outer appearance of the person: in Mu.ammad one could see the outer signs of his inner perfection. For this, one should be careful in choosing the person who is to rule a kingdom. He should be neither too tall nor too short, his hair should be dark and absolutely not reddish. His eyes should be black, because blue eyes are a sign of bad character, his face should be of optimal shape and one should not see “arrogance in his eyes” (). The author lists various good and bad signs in the outer appearance of a person. The analysis is extended to all areas and many outer characteristics of man are given meaning: excessive hair on the chest and belly is a sign of a savage nature, a lack of understanding and a love of injustice; the person with a good character has white skin with only a little yellow in it and so on. The optimal shape of the head, the face and the body parts are defined, and all the oddities are seen as signs of bad character. In addition to physical characteristics, inner virtue is reflected, for instance, in the voice of a man.

Such expressions of the outer beauty of man, although they are explained to be a consequence of inner beauty, give a rather superficial image of the idea of man, and Ibn .Arabi cannot accept it as such. After the systematic listing and explanation

how the nature of the human spirit can be seen in his physical appearance, the author turns to the physiognomy of religious scholars, al-firasa ashshar'iyya, which he characterizes as more important (Ibn .Arabi: ). In this context, Ibn .Arabi describes the veils which prevent us from seeing reality. At the end of the chapter, it is noted that ugliness or beauty can only be seen and interpreted

through religious learning: the reality is only understood by those who understand the religious truth (). For Ibn .Arabi physiognomy seems to be a discipline of the learned ones and its real secrets are not as evident as they seem to be for the practitioners in the field in its pure intellectual form.

Throughout Ibn .Arabi's examination of intellectual physiognomy the medium is seen as the ideal and all extremities are defined as expressions of something suspicious. Only occasionally are positive characteristics connected to extremities and even then they are only in the secondary position in the hierarchy of virtues: although a big nose is a sign of bravery, the optimal equilibrium is found in men with a straight nose of medium length and thickness, who are typically intellectual and understanding (Ibn .Arabi: —). This ideal middle way is explained by

the cosmological position of the human being: the essence of the human spirit (arru. al-insani) is to be a mediator (mutawassi.a) between the intellect and matter. In some people one of these two dominates. The ideal is a balance of the two, which can also be seen in the physical appearance of the human being. (– )

Although microcosmic comparisons or other explicit references to microcosmism do not appear in Ibn .Arabi's account of physiognomy, the basis of the theory with the middle position as an ideal is explicitly connected with elementaristic microcosmism in the form in which man is seen as the middle being bringing together the material and spiritual. The physiognomic theory as presented by Ibn

.Arabi can be seen as an interesting example of the way the topic of man as the middle being, already discussed in Chapter , is taken to the level of human physiology and aesthetic ideals are connected with the human body. Although for Ibn .Arabi the perfection of a human being is clearly connected with the spiritual, in this context we again see that the middle position is defined as the ideal (as noted above, see ..).

## .. Alchemy

Alchemical theory is based on a knowledge of the transformation of beings. Mediaeval Islamic alchemy has in its background the view that every physical body is constituted of mercury and sulphur, which are placed at the centre of the universe and out of which the four elements develop. Because every being is ultimately constituted of the same elements, transmutation between the species is possible. According to Paola Carusi (: , : ), the transformation appears in two forms in tenth-century Arabic alchemy: horizontally, through generation and corruption (kawn wa fasd), when the transformation takes place by means of a reaction between two individuals, and vertically, by means of composition (tarkib) or decomposition, when the transformation is about one individual, which through change in its equilibrium descends or ascends in the hierarchy of beings. These two are not, however, exclusive, and in some works, like in Mifta. al-ikma, both appear.

Both of the two branches appear in the Rasa.il. On the one hand, the Ikhwan write in the th epistle (R II: ) on minerals that there are four kinds of minerals. An influential factor in this is the soil, which defines the value of the mineral. In addition to soil, the maturing process is essential: the more time the maturing takes, the more precious is the result. Salts and alum need only one year or less of maturation, but the most precious minerals, like diamonds, need a number of years. This and the often appearing notion of the middle beings between the species (see ..) bring to mind the horizontal theory proposed by Carusi.

On the other hand, the Ikhwan continuously emphasize that the differences between beings are due to their form (.ura), not to the matter they are constituted of (e.g., R II: ). Thus, especially as regards their idea of man, the Ikhwan seem to follow the vertical theory, although, for instance, in their embryological views they do not clearly express it. The theory based on the concept of ideal equilibrium and proportionality is present in various contexts in the Rasa.il (see, e.g., R II: –). It is not, however, treated in detail in the context of minerals. The major concern of the Ikhwan in the context of alchemy seems to be simply to understand the realm of minerals and – by means of this understanding – possibly refining them.

In the Jabirian Kitab ar-ra.ma (–), perfection is acquired through the balance (i.tidal) of the natures of the very same being – in Carusi's terms this would be vertically. It is said that the human being only produces another human being and the bird only produces another bird and the same applies to all animals: they can only give birth to their own kind, and, in the same way, gold can only come from gold. This indicates that the author sees transformation between species as impossible. Hence, perfection – be it that of minerals, animals or a human being – is about the balance between the opposites appearing in each being, which comes to being as a combination of the different natures. The weakest things are those which have some forces which dominate over other forces, while the least fragile ones have harmony between the opposing forces which appear in them: they are the best balanced. The most opposites appear in animals and, especially, in human beings. If the natures are in balance in the human being, he is healthy, but if one of them starts to dominate over the other, he becomes sick. Thus, the gravity of the illness is due to the extent to which one nature dominates over the other. In the worst case, death takes place and the soul separates from the body. The author adds that this is the way God has created man: if he had wanted man to remain forever, he would have created him from a simple substance, not from four natures: everything which is a combination of them perishes, including man, minerals and the Large World. The things having least inconsistency of opposing forces in them are such noble metals as gold and silver.

In the same work (Kitab ar-ra.ma: –), the author disproves the theory of the Elixir made of animal substances like blood, urine or saliva, and affirms that: “[t]he ones who confirm these claims are ignorant of the requirements and creation of the three realms, which are minerals (.ajar), plants and animals, and they are ignorant of the degrees of transformation of some substances to others.” After explaining what the Elixir is not, the author explains where it can be found:

Know that the Mighty and Powerful (the Elixir), which has been praised and which has

been spoken of and which is guarded as a secret, must be like the microcosm (al-.alam a.-.aghir), which is the human being and what is analogous with it. That means that the operation (of preparing it) must include marriage, pregnancy, decomposition and temporal duration, and the operation must have male and female participants and it must contain growth before the Elixir is perfected. These conditions have to be exactly like in the case of the human being.

In addition to bringing out the microcosm-macrocosm analogy, the author seems to define what he finds essential in humanity. Later in the Kitab ar-ra.ma (—), the author says that the Elixir is like a unitary human society with strong individuals, who have identical natures, characters and desires: it is unified and does not have opposition. Its meeting with another, badly organized and disunited society is like the meeting of the Elixir with matter. This comparison in the context of the Elixir evokes the city-state comparisons in the description of an ideal human being, which will be treated in Chapter . City-state comparisons are typical examples of sociological holistic microcosmism and are usually employed in expressing the ideal of the human being. The use of the analogy in the description of the Elixir is exceptional, but it is also connected to its traditional form, since the Elixir is also paralleled with the human being.

The idea of man as the microcosm is explicitly mentioned several times in the Jabirian corpus. When the microcosmic man is compared with the Elixir and especially when the sociological aspect of the analogy is involved, it can be seen that this microcosmic position is a feature of a human being who has achieved the perfect balance of opposing forces within him. Thus, as we can see, although no deeper allegorical meanings would be read from the writings of the field, the perfection of the human being is relevant from the perspective of alchemical theory.

This perfection is, however, essentially different from the other views on human perfection in my study. Carusi (: ) examines the dualism concerning two opposites, coincidentia oppositorum, which, according to her, might be the core of all alchemical philosophy. In the case of the dualism in Mifta. al-.ikma, she accentuates that it is in no way religious, Zoroastrian or Gnostic. It is a philosophical idea, which, according to Carusi (: ), does not have ethical nuances: it is not about the moral perfection of a human being. Instead, as Carusi emphasizes in the discussion on dualism and perfection in this context, the interest is primarily on the physical perspective. In the previous chapter on the treatment of the animal side of man, we saw that microcosmism appears in the context of ethics in many texts, including al-Ghazali's, the Ikhwan's and al-Qazwini's writings. In the next chapter, on the other hand, it will be seen that the analogy is often used in more detailed descriptions of human perfection, especially in the mystical

tradition, and then the ethical side is in many cases emphasized. The physical approach distinguishes alchemical theory from all the other philosophical traditions examining the microcosmic idea and human perfection.

The Jabirian alchemical theory represented the most elaborate chemistry of its day. Later chemistry was a successor to this theory, which was developed already in the texts attributed to Jabir ibn .ayyan. Nonetheless, in Jabirian alchemy there are also philosophical elements that were abandoned by such critical scientists as Abu Bakr Mu.ammad ibn Zakariyya ar-Razi (d. ), who is often considered to have been the father of practical chemistry. Some views appearing in the Jabirian Corpus were seen as marginal in the later mediaeval Islamic scientific tradition, if not at the actual time of their composition. Gerard Heym (–: –) mentions, however, that although ar-Razi’s works on chemistry concentrated on more practical topics, his worldview was actually very similar to that expressed in the Jabirian Corpus and included such Isma.ili concepts as “a belief in the interaction of the macrocosmos and the microcosmos”.

## .. Music Therapy

In addition to the more marginal scientific theories, the microcosm-macrocosm analogy appears to be attached to some generally accepted scientific theories of the Middle Ages. From the perspective of physiological microcosmism, an important example of this is the theory of the four bodily humours. The whole Galenian physiology is constructed on the concept of equilibrium of the four bodily humours, and this theory maintained its position in medical theory until modern times. Differences between human beings in the Rasa.il are explained to be due to four factors: firstly, the balance of the bodily humours, secondly, the climate and nature of the soil in the geographical area, thirdly, the education and guidance given by parents and, fourthly, the influence of the celestial bodies (R I: , III: ). In various other contexts as well, it can be seen that the bodily humours are significant in the Ikhwan’s idea of man. An example of their close relationship with microcosmism comes from music therapy. The Ikhwan do not treat medicine as a separate discipline. Music therapy is the most profound treatment of humoral theory in the work and is based on the fourfold division of man. Thus, I will first consider some general features of the fourfold nature of man and the ways it is treated in the corpus. Then I will examine music therapy as it appears in the Ikhwan’s epistle on music.

## ... Fours in Man

All divisions of things into four in mediaeval thought relate to four as the number of the elements. The human being forming a combination of the four natures (.aba.i.) of the elements is, on the other hand, the very basis for the idea of man. This can be seen, for instance, in the Sirr: at the beginning of the chapter on the

creation of man (–, VI.), it is said that the position of the human being among the created is due to the balance of the elements in him: in bird, for instance, air is a dominating element and in fish it is water. In man, the elements appear in the right proportions, which is later (–, VI) explained to be the reason for the erect posture of the human being: in him the elements are arranged in four layers, according to their heaviness – the higher ones are air and fire and the lower ones earth and water.

In the *Rasa'il*, the correspondence between the four elements and the human body appears as its own subchapter in the epistle *On the Saying of the Wise that the Human Being is a Microcosm*. The elements are not only found in the human body, but they correspond to particular parts of it:

Know that there are under the sphere of the Moon four elements (arkan), and they are al-ummahat, through which the generated beings (muwalladat), meaning the animals, plants and minerals, persist. In the same manner, there are four parts in the structure of the body and these form the complete body: first the head, then the breast, then the stomach and then the inner cavity until the end of the legs. These four correspond to the elements: the head, because of the rays of eyesight and the movements of the senses, corresponds to the element fire. The breast corresponds to the element air because of breathing and inhaling the air. The stomach corresponds to the element water because of its moistness. The inner cavity until the end of the legs corresponds to the element earth, because the human being rests upon it like the three other elements rest upon the earth and are around it. (R II: )

Like in the *Sirr*, the elements appear in the human body in the same order as they are arranged in their own spheres within the sphere of the Moon.

Brief references to the four elements in man appear in all of the texts. For instance, in the *Ghaya* ( ) the human being is said to be a combination of the delicacy of the substance and its thickness: in it, there is the thickness of earth, the delicacy of air, the subtlety of fire and the coldness of water. In the *Jabirian Corpus* the elements are often present since the whole *Jabirian alchemy* is based on the natures of the four elements. This can be seen in the context of microcosmism as well. For instance, in *Kitab us-uqus al-uss al-awwal* ( ), it is remarked that God made the human being a microcosm for his body, which brings together the four natures of the elements.

From the perspective of the human body, the most important fourfold division is, however, the Galenic theory of bodily humours. In the *Tadbirat*, Ibn .Arabi (–) describes the correspondence between the four elements, the bodily humours and the bodily faculties of man. Ether is said to correspond to yellow

bile and digestion in general, air to blood and the attractive faculty, water to phlegm and the excretory faculty and earth to black bile and the retentive faculty. As can be seen, for some reason fire is not included in the comparison, but ether, which is said to be hot and moist in its nature, is involved instead.

Such simple parallelisms between the human being and the universe are obvious examples of elementaristic microcosmism. The Ikhwan, however, go deeper in the fourfold divisions of things and elaborate – based on these simple analogies

– a complicated system of tetrads (*murabba'at*), which has a profounder meaning in association with the idea of man. It evidently falls into the category of structural microcosmism. The division of things into tetrads appears at various levels of reality and references to it continuously occur in the *Rasa'il*. In the first epistle (I: –), the Ikhwan list things that appear in fours: natures, elements, bodily humours, seasons, directions, winds and *mukawwanat* (minerals, plants, animals and human beings – the last exceptionally as its own group). In the epistle on astronomy (I: –), they refer to the topic mentioning the seasons, the compass points, the elements, their natures, humours and the winds. Four groups which usually appear in these contexts are the elements, their natures, bodily humours and seasons (see, e.g., R II: ). In the epistle on music, the Ikhwan provide a particularly detailed exposition of the tetrads and their significance.

... Practical Interpretation of the Tetrads

The Influence of music on human health was widely accepted in mediaeval Islamic thought. It appears in many medical works, but the reasons why melodies affect the body are rarely examined in the way that this is done by the authors of the *Rasa'il*. Although music therapy also appears in connection with other musical theories, it is best understood in the frame of the cosmological definition of music (see ..).

The lute is a special instrument in the mediaeval theory of music and the Islamic tradition contains many legends about its invention. Some of these parallel the lute with the human body. In one, the invention of the instrument is attributed to the biblical figure of *Lamech*. It is said that he made the first lute while grieving for the death of his child and constructed it based on the skeleton of the dead son. (*Shiloah* : –) The Ikhwan regard the lute as an instrument of philosophers and believe that philosophers themselves invented it. In the *Rasa'il*, it is considered the noblest of instruments, and the lute has an important role not only as an exemplary instrument in the theory of music, but also cosmologically.

The Ikhwan reserve a long passage (W: –) for the description of the tetrads in their epistle on music. According to them, the seasons correspond to the four elements. The arrangement of the strings of the lute from the lowest to the

highest, on the other hand, follows the arrangement of the elements in their own spheres under the sphere of the Moon. The highest string, zir, which is the bottom string in the playing position, corresponds to fire, the lowest one, bamm, to earth. The correspondences form a system that includes various areas:

By analogy of this model, dear brother, if you scrutinize the conditions of the things occurring (mawjud) in nature and consider the attributes of existing (ka.in) sensibilia, you will find that they all fall into these four divisions, some concordant with each other, others opposed to one another, as specified by God Almighty when He said, “and We created pairs of all things”(Q. :), and when He said “He created all the parts of things that the earth produces, as well as themselves and other things they do not know about” (Q. :). (Trans. Wright, in W: –)

Altogether, twenty-one things appear in the listing of the correspondences, including, among others, the signs of the zodiac, winds, tastes and the times of the day. The tetrads have various levels that could be of interest for the idea of man. Seasons are compared with the four ages, the faculties of the human soul and moral qualities. From the perspective of the human body, the most important level of the tetrads is that of the bodily humours.

The tetrads in general are said to have a practical scientific value. In the epistle on music especially the correspondence between the bodily humours and tones is obviously important from the perspective of the practical meaning of the theory. Maintenance of a healthy equilibrium between the bodily humours and their stabilization by means of music clearly appears in the Rasa.il: “Well-balanced and well-measured sounds that stand in proportionate relationships help restore equilibrium to the blend of the humours” (W: –, trans. Wright, in W: ). On the other hand, in the worst case the lack of harmony in music may cause death. The system of correspondences between tunes and bodily humours offers the theoretical basis for employing music as a method of healing.

According to the Ikhwan (W: –), each string of the lute affects one of the bodily humours and strengthens its influence. The highest string strengthens yellow bile and attenuates the power of phlegm. The second increases blood and attenuates black bile, the third increases the power of phlegm attenuating yellow bile, while the fourth strengthens black bile and calms the passion of blood. In practice, healing is said to happen by combining these tunes in rhythmic melodies, which are played at the time of day or night which is contrary to that of the prevailing illness.

The cosmological theory of music had been summarized in a particular instrument



by earlier philosophers as well. The doctrine that a stringed instrument, often a lyre, has a connection with the universe in its entirety was widely known among the Pythagoreans (Conger : ). In the Islamic tradition, a parallelism between the lute and the surrounding reality was already drawn by al-Kindi, who develops a theory of the whole series of tetrads according to which the musical modes bring out motions and strengthen virtues or vices. A difference, noted also by Wright (: n. ), between the Ikhwan and al-Kindi is, however, that the Ikhwan – despite the important position of the lute in their theory – do not construct a web of correspondences, as al-Kindi does, around the instrument. Their tetrads are based on the four seasons, the lute being just one level of the analogy.

Considering the general importance of the microcosm-macrocosm analogy in their system, the use of the seasons as the starting point in the tetrads might reflect the comprehensiveness of the system for the Ikhwan: although the tetrads are placed in the epistle on music, analogical correspondences are emphasized to apply at all layers of reality, not only in music. On the other hand, this might also be an indication of Jabirian influence. In the *Kitab ar-ra.ma* ( ) it is explained that all beings are divided into four natures. In “the Larger World” (*al-.alam al-akbar*)

– meaning the “world of four natures or the world of the heavens and earths” – the four natures are hotness, moistness, dryness and coldness, while in the human being they are the bodily humours. The four seasons, on the other hand, are described as “the four natures (*a.-.aba.i.*) of the year”.

Thus, as Wright (: ) mentions, the decision to choose the four-stringed lute (not, e.g., the six-stringed, as al-Farabi does) as the basic instrument is made to match other phenomena. Considering the importance of the number four in the whole *Rasa.il* (see ..), I find it inevitable, and it would be rather surprising to find, for instance, the number six in this position, as it does not have any special role in the rest of the work.

Even if the cosmological approach to music was quite marginal in the Islamic mediaeval theory of music, the therapeutic value given to music maintained wide acceptance in Islamic science throughout the Middle Ages. For example, in Ibn Sina’s *al-Qanun fi..-.ibb*, the influence of music on the human soul is part of medical theory. Ibn Sina’s views on the therapeutic value of music appeared in Islamic as well as in European writings on medicine up until the 17th century (Shiloah : ).

When it comes to medicine, its position in the thought of the Ikhwan is a mystery in the current research: in spite of their quite extensive study encompassing the whole range of scientific disciplines, the authors of the *Rasa.il* do not dedicate

any of their epistles to medical sciences. This gives the passages touching upon the topic an important role as indications of the medical views of the authors. Human physiology, as it is treated in the contexts of physiological microcosmism, includes references to medical theories: humoral theory often appears in the context of explicit physiological comparisons of the Ikhwan. Even more clearly, however, the microcosm-macrocosm analogy prevails as the underlying theory in the treatment of the tetrads in the epistle on music. A closer examination of the medical notions appearing in the context of microcosmism in the *Rasa'il* might reveal something new concerning the Ikhwan's interpretations of this scientific discipline.

In astrological and alchemical texts as well as in music therapy, the correspondence between the microcosm and the macrocosm is not just about understanding the system, but is also about influencing it by controlling the manifold world order or at least predicting its actions. When a physiological correspondence takes place, the microcosmic idea often implies the influence between the layers of reality: the layers do not just resemble each other but also depend on each other. For instance, when the alchemical theory is understood as a science aiming at manipulating reality more extensively – not at purifying the human being – the human body is a way to explain and understand the correspondences necessary in the process and, as such, the correspondence between man and the macrocosm is primarily instrumental for the authors.

Although in its explicit forms physiological microcosmism is about the actual state of men, some of these scientific views connect physiological microcosmism

– at least to some extent – to the potential aspect of the analogy as well. This is especially clear in the case of alchemy, which is about the perfection of substances at the physiological level. As will be seen, though, in the context of the spiritual in the human being the potential aspect is given a much larger role.

It seems that the scientific theories presented above define the position of the human being in the universe in two different ways. On the one hand, man is greatly dependent on the universe around him, which is an obvious feature in all astrological theories. On the other hand, the way that alchemists see microcosmic man corresponding with the most perfect substance clearly indicates that the human being – as a reflection of reality as a whole – is the most central being among the created. Another and even more extreme example of this adoration of the physiological aspect of man is the way the Ikhwan treat the perfect proportions in the human body.

## . BECOMING A MICROCOSM

He who acquires a portion of knowledge, he himself becomes a world. (.afe., d. )

This verse contains some central perspectives on the microcosmic idea in its normative form as it will be approached in this chapter. If in previous chapters it has been mostly understood as an actual state of the human being – something that is inevitably attached to the human being for his species or body – now the emphasis will be on the microcosmic position as a potential state for a human being. Thus, on the one hand, being (or becoming) a microcosm is seen as an ideal, the role that should be taken or imitated, and, on the other hand, this ideal microcosm appears in an individual human being. In this context, the focus is usually on the spiritual faculties of a human being, which are often connected with knowledge. For this reason, the main concern in this chapter will be on the non-corporeal – that is to say spiritual – aspect of the human being.

In this chapter, my aim is to find out how microcosmism is employed in the descriptions of the spiritual in man and such concepts related to it as the intellect, the soul and the self, and, further, what these contexts reveal about the definition of humanity. As regards normativity, the main question of this chapter is how the authors express their views concerning the ideals of humanity and the process of human perfection when microcosmism is involved.

The examination will be divided into four subsections. The first two concentrate on the explicit forms of the analogy while the latter two represent mostly implicit interpretations of it. The first subsection examines the use of the microcosmic idea in the definition of the “spiritual” in man, which is usually understood as the real essence of humanity. Then the primary attention will be on different divisions of the human soul into parts and faculties, which leads us to the ways the inner and outer senses are examined in explicit comparisons. In the second subsection, faculties of the soul and explicit spiritual comparisons remain a central theme, and they will be approached according to the motivations they are given in the texts concerning human perfection. They will be seen to have a role in expressing the epistemological as well as ethical views of the authors. Epistemology is of central significance in the third subsection, in which the analogy will be examined, firstly, in the context of self-knowledge, secondly, as it appears in theories of knowledge and, thirdly, as it is related to mystical perfection. When human perfection is approached from the mystical perspective, sometimes the third level, God, is included in the analogy. The divine aspect is also present in the last, fourth subsection, in which the normative microcosmic idea will be examined from the perspective of the activities of man. It will be seen that the role of a human being as a creator also has a microcosmic dimension.

## . THE SPIRITUAL IN MAN AND THE MICROCOSMIC IDEA

Comparisons laying emphasis on the physiological aspect of the human being

often appear as listings of the correspondences between parts of the human body and the surrounding reality, and their meaning seems to be restricted to describing the wonderful structure and functions of the human organism as well as expressing the holistic composition of the human being (see .). In this chapter, explicit comparisons will be examined from the perspective of the spiritual – or mental – in the human being. Firstly, the general appearance of the soul and its parts will be examined in the comparisons of the *Rasa.il*. Secondly, the concentration will be on the faculties of the human soul, and the theory of inner and outer senses will be approached more broadly in the corpus.

## .. Unity of the Soul

Most mediaeval Islamic thinkers follow the Aristotelian tripartite division of the human soul into vegetative, animal and rational parts. In the Ikhwan's epistle *On the Structure of the Body* (R II: ), the tasks of the tripartite soul are explained in the following manner. The vegetative soul (*an-nafs an-nabatiyya*), which includes inclinations (*naza.at*) and desires (*shahawat*), is located in the liver and spreads its influence from it through the veins. The animal soul (*an-nafs al.ayawaniyya*) containing movement, natural disposition (*akhlaq*) and senses is located in the heart and emanates its influence through the arteries. The rational soul (*an-nafs an-na.iqa*) encompasses conscious perception (*tamyiz*) and gnosis (*ma.rifa*) and has its location in the brain, influencing other parts of the body through the nerves.

Although in the 3<sup>rd</sup> epistle (R III: ), the Ikhwan strongly condemn the way some “people of science” (*ahl al-.ilm*) refer to the three parts of the human soul as different souls, again in the 4<sup>th</sup> epistle (R II: ) they divide it into even smaller units referring to sight as the soul of the eye, hearing as the soul of the ear, smell as the soul of the nose and taste as the soul of the tongue. This highlights a characteristic

feature in the descriptions of the human soul in the *Rasa.il*: the Ikhwan emphasize the human being as a psychophysical whole frequently defining the locations of the faculties in the body. Earlier in the same epistle (R II: –), these souls are examined, with a slightly different division, paralleling them with three “tribes” dwelling in a city: the appetitive (*shahwaniyya*) soul is like jinns, the animal (*.ayawaniyya*) soul like people and the rational (*na.iqa*) soul like angels.

In spite of describing such divisions, the Ikhwan's emphasis is on the soul as a unity of these three aspects, which are hierarchical, but, however, parts of the same soul. The vegetative, animal and rational souls are described as being like the branches of the same tree, like rivers flowing from one spring, like men generating from the same tribe and like three different professions of one man. When

the soul concentrates on nutrition or growing, it is called the growing soul, when it concentrates on sensing and moving, it is called the animal soul, and when it concentrates on thinking and making distinctions, it is called the rational soul.

The unity of different aspects of the soul is due to the fact that all souls are seen as faculties or parts of the Universal Soul. The Universal Soul emanates its domination (ukm) to all beings. This is a basic element in the ontological system of the Ikhwan and it is often (e.g., R III: ) affirmed with the Qur'anic verse “your creation and your upraising are but as a single soul” (:) – the same verse which appears in the context of the human archetype (see .. n. ). This dominance at the level of the universe is found to correspond with the dominance of the individual soul in the human organism: the faculties of a human soul spread their influence throughout the whole human body, through all its parts and members. In the 4th epistle (R IV: ), this is linked with the term microcosm and it is said that the Universal Soul rules the heavenly bodies and makes them move “like the human soul, which is the microcosm, moves all body parts and members of the body”.

of a natural disposition and the gnosis related to the rational soul is also referred to as reflection (fikir). (See, e.g., R II: )

The domination of the body over the soul is also a prevailing theme in the 5th epistle On the Saying of the Wise that the World is a Large Man, and the emanation of the domination of the soul is explained with comparisons between various layers of reality (R III: –). In one of these comparisons, different classes of souls as faculties of the Universal Soul are described as a tree. A tree stands as an example of the combined beings in a passage in the 6th epistle on logic as well (B: ). There a tree – together with the human body and a city – is mentioned as an example of the entities constituted of different substances opposed to such things as stones, which are constituted of a single substance only.

After the tree comparison in the 6th epistle follows a comparison between the emanation of the Universal Soul's dominance to all beings and the sharia with its different obligations. The religious law has various rulings originating from different sunnas and these sunnas have different akam. The akam, then again, have udud which differ from each other. All these, however, form one religion, which is divided into various madhahib. In the same manner, the Ikhwan claim, the domination of the faculties of the Universal Soul diffuses, on the one hand, to all beings of the universe – to heavenly bodies, elements, muwalladat, murakkabat and objects made by human hands – and, on the other hand, to different types of souls: to simple (basi.a), generic (jinsiyya), specific (naw.iyya) and

individual (shakh.iyya) ones. The domination of the Soul is also compared with a craftsman working in his forge using different instruments and tools. It is described as being like the rule of the lord of a house over different rooms and parts of the house – just as the soul has its faculties, so too the lord has his servants and helpers. After that the king of a city-state is paralleled with the Soul: the city has inns, streets, houses and everything that a city may have. It is ruled by one king, who has various adjutants and servants, and his commands are diffused by various mediators to all inhabitants of the city. Just as there are different types of souls, so too there are different people in the city: learned and ignorant, men and women, good and bad.

These comparisons may be seen as descriptions of the different abilities of individual human souls and, as such, as declarations of the differences between men. Taking into account the explanations attached to them, more than that, these comparisons express the ontological system and the unity of all souls highlighting the twofold division prevailing in all beings: the soul with its many faculties and the matter dominated by it. Although the Universal Soul is divided into different parts and these parts are further divided into faculties, all are constituted of the same unified spiritual substance and act as its aspects. Like the universe as a whole, the human being is ruled by its manifold but unified spiritual aspect. More detailed analysis of the hierarchies inside the sphere of the spiritual is examined in comparisons which concentrate on activities and on the nature of the faculties pertaining to the rational soul. In this case the emphasis of the comparisons is more clearly on the human being.

## .. Faculties of Man

Different activities of the human soul are explained as faculties of the soul. These faculties are areas of responsibilities, some of which can be found in other living creatures and some are particularly characteristic of the human soul. Division of the faculties sometimes occurs in accordance with the tripartite division of the soul, sometimes it is clearly independent of that division. The faculties of the human soul often appear in explicit spiritual comparisons. An overview of these comparisons given in this subsection and the ways the faculties of the soul appear in them will serve as an introduction to this theme, which recurs in the comparisons later in this chapter. Before tackling the use of the microcosm-macrocosm analogy in this context, some basic differences in approaches to the faculties in the texts will be clarified.

## ... Categories of the Faculties

Like in the Aristotelian tradition, in Islamic thought various faculties of the human being are often divided into outer (.ahir), or corporeal (jismani), and inner (ba.in), or spiritual (ru.ani), senses (.awass) or faculties (quwwa, pl. quwa). Faculties

pertaining to these categories vary, but the basic idea is usually that the outer senses include the five senses (sight, hearing, touch, taste and smell) and the inner senses refer to post-sensational faculties. These are often constituted of different kinds of combinations of common sense (al-*iss al-mushtarak*), imaginative faculty (al-*quwwa al-mutakhayyila/al-quwwa al-mu.awwira/al-khayal*), estimative faculty (al-*quwwa al-wahmiyya/al-wahm*), faculty of reflection (al-*quwwa al-mutafakkira/al-fikr/at-tafakkur*) and memory (al-*quwwa al-.afi.a/al-.if.*), sometimes accompanied by recollection (adh-*dhakira*). The number of the inner faculties varies between three and seven: sometimes several faculties are defined as different aspects of a single faculty, sometimes one is divided into many separate faculties.

Often the faculties are defined as having physical locations in the body. The outer senses are attached to the body parts relevant to them, for instance, sight through the eyes and touch through the hands. The inner senses are located in three chambers of the brain: usually faculties receiving and gathering information from the senses, including common sense and imaginative faculty, are placed in the front ventricle; those processing these images and distinguishing the false from the true ones, such as estimation and reflection, in the middle cavity; and memory preserving the images and recollection recalling them from the past are located at the back of the brain.

In addition to these two classes of senses, among the faculties of the human being often appear different bodily activities, such as digestion and attraction, and the incentive or motive faculties of anger (al-*gha.abiyya*) and desire (ashshahwaniyya). Their positions in the classifications vary.

Of the texts treated in this study, classifications of the human faculties appearing in the works of al-Ghazali resemble this basic division with some variations.

The Ikhwan's definition of the human faculties has some particular features which differ from it. The most important concerns the categories of the faculties. In the epistle *On the Saying of the Wise that the Human Being is a Microcosm* (R II: ), the Ikhwan list as the seven corporeal faculties those which control the bodily activities: attractive (al-*jadhība*), retentive (al-*masika*), digestive (al-*ha.ima*), excretory (ad-*dafi.a*), nutritive (al-*ghadhiya*), growing (an-*namiya*) and productive (al-*mu.awwira*). These they contrast with seven spiritual faculties, into which the Ikhwan include the five senses and, in addition to these, the faculty of speech (al-*quwwa an-na.iqa*) and intellectual faculty (al-*quwwa al-.aqila*). Places of the senses are explained to be in the relevant parts of the human body: sight in the eyes, smell in the nostrils and touch in the hands. Speech is located in the throat and intellect in the middle of the brain.

Later in the same epistle, the Ikhwan (R II: ) refer to five other faculties of the human soul, which are the imaginative faculty located in the front part of the brain; the faculty of reflection in the middle of the brain; memory at the back of the brain; the faculty of speech in the throat and the faculty “through which the soul produces writing and all the other crafts”, which refers to the productive faculty (al-quwwa a.-ina.iyya, sometimes al-quwwa al-mu.awwira) in the hands. The tasks of these faculties are defined in the following way:

When the imaginative faculty receives the images (rusum) of sensible objects from the senses it perceives them and forwards them in order to collect them together. Then it sends them further to the faculty of reflection, whose location is in the middle of the brain, for it to distinguish one from the other and to recognize the true ones from the false ones, the correct from the erroneous and the disadvantageous from the beneficial. Then the faculty of reflection sends them to the memory, which is located in the back of the brain, for it to preserve them until they are needed. Then, when the faculty of speech receives these preserved images, it expresses them with clarity to the faculty of hearing of those present in that time. (R II: —)

The task of receiving and combining the information gathered by the senses, which in the Aristotelian division is given to common sense, is defined by the Ikhwan as a task of the imaginative faculty. The other absent faculty is the estimative faculty, whose role is included in the tasks of the reflective faculty. The fifth, the productive faculty (al-quwwa a.-ina.iyya), is defined in the following way:

The productive faculty, when it wants to write down the words, makes letters with a pen, writes them on various materials and within scrolls so that the knowledge is preserved written down and it remains a benefit from those who have passed away to those who come after them, a tradition of the earlier generations to the later ones and a speech of those absent to those present. This is a great blessing from God, be he exalted, to the human being, as it is said in his Book: “Recite: In the Name of thy Lord who created, created Man of a blood-clot. Recite: And thy Lord is the Most Generous, who taught by the Pen, taught Man that he knew not.” (Q. :—)” (R II: )

According to Wolfson (b: —), the Ikhwan’s system is a combination of Galenic and Stoic classifications of the inner senses. It was adapted by them most likely through John of Damascus’s texts. In them, the tasks of the faculties were not defined in detail, which explains some peculiarities in the division of the Ikhwan. The most important of these concerns al-quwwa an-na.iqa, which appears in the Rasa.il with an ambivalent meaning: sometimes it evidently refers to the rational faculty, sometimes it is regarded as the faculty of speech like in the citation above. Often the meaning can be read from the context, such as the location



given to the faculty. A literal understanding of the faculties also led the Ikhwan to interpret the Stoic reproductive faculty as production in general, not in its original meaning referring to procreation.

As we can see, the Ikhwan define three “levels” of faculties, which are partly overlapping. Although this is not explicitly present in this context, these three levels may be loosely related to the tripartite division of the soul. In spite of their otherwise remarkable interest in the epistemological perspective of the human being, the corporeal activities (digestion, growth, etc.) are included in the division, which – once again – lays emphasis on the physiological aspect of the human being. The incentive faculties do not appear in this classification although they are referred to in many explicit comparisons. Often desire is connected with the vegetative soul, as was seen above, and anger with the animal soul (see, e.g., R I: and III: ).

Al-Qazwini ((a): –) classifies the faculties in a detailed manner and pays a great deal of attention to the matter. In the .Aja.ib the faculties are divided into four classes (anwa.), which are further divided into various types (a.naf), parts (aqsam) or kinds (.urub). Unlike the Ikhwan, al-Qazwini uses the term outer senses (al-quwa a.-ahira) to refer to the five regular senses (touch, smell, sight, hearing and taste), which are, as in the Rasa.il, located mostly in their logical places with the exception of smell, which instead of nostrils, is located at the front side of the brain. Among the senses, al-Qazwini defines touch as a sense that can be found in all animals and which distinguishes animals from plants.

The second class, inner senses (al-quwa al-ba.ina) fall into three types. The first type, attending faculties (al-quwa al-khadima) are related to the functions of the body and include the attractive, retentive, digestive and excretory faculties. The second type, the mastering faculties (al-quwa al-makhduma), has to do with activities of the body, which are the faculties of digestion, growth, reproduction (al-muwallida) and production (al-mu.awwira). As can be seen, these two types are the same as the seven corporeal faculties of the Ikhwan, with the addition of the reproductive faculty, which was misunderstood by the Ikhwan. The third type of the inner faculties is the perceptive faculties (al-quwa al-mudrika), which include the traditional inner senses: common sense, the imaginative faculty, reflection, estimation and memory. These are located in different parts of the brain, which are overall in accordance with the view of the Ikhwan. Common sense and estimation – faculties which are not present in the description of the Rasa.il – are located in the front of the brain and in the middle of the brain.

Completely distinct from other divisions are the third and the fourth classes of al-Qazwini. The third is that of agent faculties (al-quwa al-mu.arrika), which are

divided into two: incentive faculties (al-quwa al-ba.itha), including desire and anger, and efficient faculties (al-quwa al-fa.ila), which are governed by the faculty of longing (al-quwwa ash-shawqiyya). Al-Qazwini calls the fourth class the intellectual faculties (al-quwa al-.aqliyya), which distinguish the human being from other animals. Its first part is already present in a child and makes possible the preparedness for theoretical concepts. The others develop at different stages of life and have to do with different areas of knowledge: the second with logic, the third with applied sciences, and the fourth and the highest one with the realities of things.

Suhrawardi

also uses the light metaphor in the description of the human faculties.

In the .ikma ((a): –), he calls the rational human soul “commanding light” (nur isfahbad), which is divided into five outer senses and their inner counterparts, of which he mentions common sense, estimation and the imaginative faculty. Suhrawardi

highlights that the faculties are not limited to five in number

and emphasizes their unity: “just as all the senses reduce to a single sense – common sense – so, too, all the faculties reduce to a single faculty in the managing light – its luminous essence, emanating by essence” (Suhrawardi (a): , trans.

Walbridge and Ziai). In addition to these, commanding light has various faculties.

Anger and desire are explained to appear in a commanding light attached to the fortress of the human body because of the two forces prevailing in Suhrawardi’s ontological system: the former is due to dominance (qahr), the latter to love (ma.abba). The faculties of digestion, reproduction, growth, nutrition, attraction, retention and excretion are needed in the corporeal fortress and, therefore, they are clearly attached to the bodily aspect of the human being. In Hayakil an-nur ((d): –), Suhrawardi

lists as inner senses common sense, imagination, reflection,

estimation and memory. Desire and anger are in this context represented as faculties of the animal soul and the lower soul of the human being.

A classification completely distinct from others in the Arabic tradition is that which appears in the Sirr (, I ..). Here the inner senses are listed as reflection (fikra), astuteness (fi.na), acumen (dhaka.), aspiration (himma) and conation (niyya). Elsewhere in the Sirr (, VI .), the author refers to the intellectual faculty, which is explicitly linked to divinity in the human being:

Concerning the divine wisdom particle (al-juz. al-.akimi al-.ilahi) in the human being, it is the intellectual faculty (quwwat al-.aql), which differs from everything else in the world, because there is no other thing in the world which would have intellect (.aql) other than the human being. For this man is called the king of the world.

As noted in .., the author of the *Sirr* (–, V .) explains the middle position of the human being with the faculties he has in common with other beings. From animals, the human being has the bestial faculties of desire and anger as well as movement and the senses. The faculties of plants found also in the human being are absorbency (*an-nashifa*), immovability (*ath-thabita*), modification (*almughayyira*), excretion (*ad-dafi.a*), nutrition (*al-ghida.*) and parturition (*alwilada*). Lastly, of the faculties of incorporeal beings the human being has reflection (*tafakkur*), the pursuit of virtues (*ittiba. al-fa.a.il*) and knowledge (*.ilm*).

These divisions are, in one way or another, applications of the ancient theories of inner and outer senses. In addition, in the epistle *On the Opinion of Pythagoreans regarding the Origin of the Intellectual Beings* (R III: –), the *Ikhwan* give a description of the development of the human faculties. At the age of four, when the rational soul takes over from the dominance of the animal soul in the human being, the faculty of speech (*al-quwwa an-na.iqa*) appears. It interprets the names of sensible things and keeps developing until the age of fifteen. After that, the intellectual faculty (*al-quwwa al-.aqila*), which distinguishes the meaning of sensed things, appears and reaches its final form at the age of thirty. Then the faculty of wisdom (*al-quwwa al-.ikmiyya*) starts to take over. Its main task is to perceive the meanings of intellectual beings. This faculty is completed at the age of forty, after which the angelic faculty (*al-quwwa al-malakiyya*) appears and develops for ten years. From the age of fifty until the end of human life, the legislative faculty (*al-quwwa an-namusiyya*) dominates. It prepares man for the thereafter and for the separation of the body from the soul. If the human soul reaches perfection before death, the faculty of ascension (*quwwat al-mi.raj*) enables the soul to rise, and if not, the soul descends to the lowest of the low. The *Ikhwan* also refer to the 11th epistle on embryology. This connects the pre-natal development of a human being starting at the moment of conception with his later spiritual development along the same continuum. These spiritual faculties distinguishing the human being from the other *.ayawan* may be related to the fourth class in alQazwini's classification, which he refers to as the intellectual faculties. As for alQazwini, their development – which is a particular feature of the human species – is related to scientific knowledge, while the *Ikhwan* have a strong religious emphasis in this context.

### ... Faculties and Explicit Comparisons

Suhrawardi ((a): ) in the *.ikma* summarizes: “the human being has the full share of the faculties of animals and plants”. The idea that all the faculties, corporeal as well as spiritual, appear in the human being is shared by many of our authors,

and it includes an allusion to microcosmism as presented in ... The microcosm-macrocosm analogy is also used to express views concerning hierarchies between the faculties, their locations and their tasks, which are the most often occurring themes in explicit spiritual comparisons.

Classifications of the faculties presented above draw a picture of a hierarchical system between the faculties from the lowest, pertaining to the plants as well, to the most noble, angelic faculties. This is highlighted in many microcosmic comparisons. Short references to such analogies appear in the Rasa'il's epistle on music (W: –) in which the hierarchies between the senses are examined as they appear in the sayings of the wise. The 1<sup>st</sup> saying argues that sight is superior to hearing, because “sight is like the day and hearing is like the night”. The 2<sup>nd</sup>, in contrast, claims that “hearing is better than sight because sight goes forth to seek its percepts, serving them like slaves in order to reach them, whereas the percepts of hearing are brought to it in order to serve it as kings (are served)” (trans. Wright, in W: ). In the 3<sup>rd</sup> epistle (R III: –), the Ikhwan say that the senses are related to the natures which appear in the World Body, which is like a large man. Touch is related to the nature of earth, because man senses everything through it, taste to the nature of water, because of the moistness of the tongue and the mouth. Smell, on the other hand, has a special relationship with the nature of air because its percepts are transmitted in the air. Sight is related to the nature of fire, because it needs light to perceive things. Again, hearing is given a special role and described as related to the nature of the heavenly spheres, the dwelling place of angels, because of the spiritual nature of its percepts.

Al-Ghazali describes the superiority of the inner senses over the outer ones in the Mishkat (al-Ghazali (b): ), where he explains the relationship of the eye to the rational faculty and notes that although the eye is light in its relation to other things, it is darkness in relation to the intellectual faculty, or, al-Ghazali clarifies, sight is one of intellect's spies. The five senses are spies for the rational faculty, which also has five spies in the realm of the unseen: the imaginative faculty, estimation, reflection, recollection and memory. Furthermore, the rational faculty is said to have more hosts and servants in its own world. In al-Ghazali's comparisons – like in the first two passages from the Ikhwan – the two most frequently occurring elements of comparisons treating the faculties of the human soul can be seen: light metaphor and elements of the Platonic city-state comparison.

It is logical to compare the faculties of the soul – the cognitive faculties in particular – with lights in the frame of the Neoplatonic ontological epistemology, in which being as well as knowledge are described as light. Light is also attached to cognition when the elements are examined in the human body and the human head, where the cognitive faculties are usually considered to reside, is

compared with the highest of the elements, fire (see ...).

As lights, faculties are easily related to the heavenly lights or planets. The distinction between the categories of the inner and outer senses is examined by the Ikhwan (R II: –) in a comparison in which the seven heavenly bodies are described as parallel with the human faculties, which, like the heavenly bodies, have their corporeal and spiritual aspects. The seven bodily faculties (attraction, retention, nutrition, excretion, digestion, growth and production) have spiritual equivalents, which are the five senses, speech and the intellectual faculty. These spiritual faculties, on the other hand, find their correspondence in the heavenly bodies – the senses in the five planets, speech in the Moon and intellect in the Sun. The five planets have two “houses” in the spheres, one in the domain of the Sun and the other in the domain of the Moon. In a similar manner, each sense has two physical locations one on each side of the body, sight in the eyes, hearing in the ears, and so on. Locating the speech in the throat brings sounds, understood as letters, into this:

The Moon takes its light from the Sun, when it runs through the lunar mansions. The faculty of speech takes the meanings for words from the intellect, while flowing through the throat and expressing them by using the consonants. The relationship between the consonants to the faculty of speech is similar to that of the lunar mansions to the Moon. (R II: –)

This comparison appears in the Ghaya () as well. Just as in the Rasa'il, the author names the same spiritual and corporeal faculties and claims them to correspond to the heavenly bodies: “Like the Moon takes its light from the light of the Sun in its mansions, so does the faculty of speech take the meanings of the beings from the intellectual faculty and speaks of them with the help of the letters of the alphabet.” Locations of the senses also seem to be compared with planets in the Sirr (–, VI., see ...), in which “seven open doors of the human head” are described to be like seven heavenly bodies guiding the human being. The meaning of this comparison is not explained, but the open doors most likely refer to the apertures of the head as locations of four senses, sight, hearing, smell and taste.

Ibn .Arabi () compares the different faculties of man with heavenly bodies explaining at the same time some of their locations. The sphere of Saturn is compared to the faculty of recollection, which is located at the back of the brain, the sphere of Jupiter to the intellectual faculty at the crown of the head, the sphere of Mars to the anger in the liver. The sphere of the Sun is like the faculty of reflection in the middle of the brain, Venus like the estimative faculty and the animal spirit, Mercury like the imagination in the middle of the brain and the Moon like

the senses.

The main tendency in spiritual comparisons is anthropomorphism of the faculties. Activities of the spiritual faculties are paralleled with activities of living creatures, inhabitants and other actors dwelling in the bodily kingdom. An example of its own kind among such comparisons in the *Rasa.il* is the one paralleling the senses with prophets, each of them introducing a new law. In this way, the comparison describes the importance of the rational soul in acquiring knowledge:

What would be like the soul with its five senses – different things they perceive and all those different kinds of species and particulars of different forms, varying shapes and diverse constructions – if not the five prophets prominent in their determination? Their sender is one, yet their laws are different. Under every law there are several rules, different

rulings and various sunnas. Under their rules, there are many nations the number of which is only known to the Necessary Being (*al-wajib al-wujud*), the One who is one from all points of view. In the same way as these different communities return to God and he is to judge the things in which they differ from each other, all things perceived

by the senses return to the rational soul (*an-nafs an-na.iqa*), for it to distinguish them from each other and to judge each reality and put them in their proper places. (R

II: –)

This comparison implicates that the five senses are placed under the rational soul and form a part of the animal soul. It also expresses a clearly philosophical approach to religion and even a pluralistic view to it. God is rarely included in the comparisons and even less by the *Ikhwan*, who usually concentrate on the created world in their comparisons. In this passage, however, He is paralleled with the rational soul as the ultimate Judge who distinguishes truth from falsity.

Sometimes faculties or parts of the soul are simply paralleled with living creatures in general: “God made all the powers of the soul, flow in various parts of the body. The difference of its members is similar to the flowing of the powers of different types of angels, jinns, people and devils in the heavens and the earth, from the highest ones to the lowest ones.” (R II: ) The same idea occurs in a city-state comparison appearing in both the *Rasa.il* and the *.Aja.ib* (see ..), in which the tribes inhabiting the city – jinns, men and angels – are paralleled with desire, animal and rational souls. In the *Tadbirat*, Ibn .Arabi () compares the incentive faculties and the needs of the human soul with animals. It is said that like in the world there are Satans and beasts but also domesticated animals, in the human being there are such things as the thirst for power and anger as well as the need to eat, drink and marry.

When anthropomorphism of the faculties is treated in more detail, the faculties are usually examined as groups of people in different professions living in a city. This is referred to in the epistle on the world as a large man (R III: ), where the Ikhwan provide a list of various inhabitants in the city and mention that “in the same manner in the Large World there are various kinds of souls – simple (basi.a), universal (kulliyya) and individual (juz.iyya)”. In some descriptions of the human soul, anthropomorphism of the faculties is mentioned in passing when the faculties of the soul are presented as servants, adjutants or soldiers of higher faculties, usually those of the intellectual faculty, and often in these contexts the hierarchy and co-operation between the faculties is emphasized (e.g., R I: , –, –, II: ).

As the name of the work indicates, Ibn .Arabi’s Tadbirat is built on the analogy of the human body as a city. In the third chapter of the work entitled On the Order and Structure of the City of the Body, which is Governed by the Vicegerent (Ibn .Arabi: –), Ibn .Arabi provides a long description of the dwelling place of the vicegerent, who has previously been explained to be the human spirit. God is said to have made a place for him to live, which he named the “body”. The walls of the city are the four elements. In the centre, he made a place for the vicegerent, which he named the “heart”. It is also referred to as his castle (qa.r). He built for the vicegerent an elevated promenade leading to the highest place of the city, which was called the “brain” and made it openings, which are the ears, the eyes, the nose and the mouth. In the centre of this, he built a storage, which was called the “imaginative faculty”. Senses could consult this storage and bring more goods into it. There was also another storehouse, that of the faculty of reflection. In it, the goods, treasured in the first one, are weighed and false ones are returned to the storehouse of the imaginative faculty. He also built a third storehouse called “memory”. As the minister of the brain he made intellect. In the city of the human being, there inhabits also the human soul, whose relationship with the human spirit Ibn .Arabi describes in al-Ghazali’s words: “the spirit is the soul’s husband and the body is their child” (Ibn .Arabi: ). In the tenth chapter (–), it is explained how the collection of tax is executed in the human kingdom. The eyes, the ears, the tongue, the hands, the belly, the genitals and the feet are said to be servants in the human kingdom. The hierarchy is described in the following way: these servants are ruled by senses, which on the other hand have as their leader the imagination. The imagination works under the rule of recollection, which is a servant of reflection. The intellect is, again, described as the minister.

In the epistle on the structure of the body (R II: –), the faculties and their various activities functioning through the body are summarized as follows:

Know that the soul, which has the body as its dwelling place, has natural faculties (quwa.abi.iyya) and innate characteristics (akhlaq ghariziyya). These are scattered in the members of the body like tribes and people living in the quarters of this city. These faculties and characteristics have actions and movements scattered in the vessels of the body. The channels of its joints are like the activities of the people living in their houses in that city, moving in its streets and working in marketplaces. (R II: )

After this, the three parts of the soul are further divided into species and this division is described in a long comparison in which types (anwa.) and activities (af.al) of the soul are equated with inhabitants of the city. Four of them are described as single (mufrad); these are the four natures of the elements: hotness, coldness, moistness and dryness. Among the other inhabitants of the city, the Ikhwan mention the nobility, princes, leaders, judges and soldiers, but also lower classes, such as foolish and ignorant people.

Three inhabitants are like masters (arbab). The first of them is the faculty of desire, whose activities without the leadership of the faculty of anger are like those of women, adolescents and fools. The activities of anger, however, if it is not supervised by the rational faculty, can be like those of the stupid and ignorant people or even devil. The rational faculty, on the other hand, needs the intellect as its master, since without it, the Ikhwan – revealing their sectarian interests – claim: “it is like the activities of the learned ones and the reciters of the Qur.an, who are in contradiction with each other in their different interpretations of the principles of religion and split into various madhahib and readings, because they are not led by the righteous Imam, who is the caliph of the prophets.”

Then the five senses are said to be like five traders in the city and the three cognitive faculties, located in the brain, take care of the business within it. The senses deliver goods to the imaginative faculty, which works as do the middlemen of merchants in the city. Reflection is like the salesmen and memory takes care of the warehouses. The seven bodily faculties are like craftsmen, whose important ability is co-operation: like the cotton ginner helps the carder, who works together with the spinner co-operating with the weaver, who works closely with the tailor, so do all these faculties of the human being work together in the human body.

In the Raw.a, .usi () summarizes this kind of analogy between the faculties of man and different classes of people:

The intellect and the soul are like the king and (his) minister. The external and internal senses, the faculties of nutrition, attraction, retention, digestion, repulsion and all the



other faculties – which are, in their nature and functions, powers to move in ways particular to each, and which are ultimately manifested in the body – are like pillars of the state, such as physicians, scribes, and similarly the other guilds and classes, such as chamberlains, deputies, guards, soldiers, servants, subjects, spies, postmen, messengers, craftsmen, merchants, and everyone else, whoever they may be, through whom the welfare and prosperity of the city is perfected and the regulation of the city becomes possible. (Trans. Badakhchani)

As usually in explicit comparisons, in all the city-state comparisons presented above, the faculties are represented as subordinate to the leading faculty. In the last comparison of the Ikhwan, the intellect has the role of the leader who is the Imam – a figure who rarely appears in their comparisons. Intellect (.aql, sometimes al-quwwa an-na.iqa), however, is usually placed on the throne of the king or some other governor of the human city. When the soul – or the spirit like in the Tadbirat – is put in the leading position, the intellectual faculty or reflection is often granted the seat as his minister, but in .usi's case, however, this is vice versa. Sometimes the leader's post is given to the faculty of reflection. Other faculties of the soul represent different groups of people from the ignorant to salesmen, and, in this way, the various classes of workmen, sometimes the whole of society, are included in the comparison.

Describing the faculties of the human soul through these microcosm-macrocosm analogies gives an image of the spiritual in man constituting of various parts and abilities which ultimately form a unity. Most often microcosmism highlights the division of reality into active rational and spiritual, i.e., living creatures, lights or planets, and the passive physiological, which is represented by material frames, such as the buildings of the city, or darkness. This is obviously reminiscent of the Neoplatonic and generally Platonic background of such analogies.

## . FACULTIES OF THE PERFECT MICROCOSM

Some spiritual comparisons explaining the hierarchies and functions of the human faculties form descriptions or allegorical stories, which can be seen as expressions of the ideal states or processes attached to a human being and his development. Although ideals appear in various forms in the same texts, in the corpus explicit spiritual comparisons mainly express epistemological, ethical or mystical ideals.

### .. City-State Comparisons and the Process of Knowing

The comparisons referred to in the previous subsection and the short references to the faculties of the soul can also be regarded from an epistemological perspective. Especially when the highest of the human faculties, the cognitive faculties, occur in city-state comparisons, they can be considered to be explanations of the process

of knowing.

The position of the senses in the process of acquiring knowledge is often examined in comparisons. In the *Rasa'il* (R II: –), the senses are described as being for the soul like informants (a..ab al-akhbar) to a king. It is said that hearing, whose location is in the ears, gives the information it receives to the faculty of the imagination, which is to the soul like an informant to the king. Smell and taste are described in this way as well. Sight, however, is like a spy for the king.

In the same epistle, the *Ikhwan* describe the relationship of the spiritual faculties with the body parts and senses connected to them in the following way:

Know, oh brother, that the human soul has five other faculties which are related to the soul differently from the five (corporeal) faculties we described above. Their flowing in the members of the body and their acts are unlike the acts of the corporeal faculties. That is because these five faculties are like partners co-operating in the reception of the forms of the perceived things, one from the other. Three of them are related to the soul like boon companions to a king, always present at his court, cognisant with his secrets and helping him in special tasks. (R II: )

Then the authors move on to the physical locations and functions of the spiritual faculties:

One of these faculties is the imaginative faculty, which is located at the front of the brain. The second is the faculty of reflection, which is located at the centre of the brain and the third is the faculty of memory, whose place is in the back of the brain. One of the (spiritual) faculties is related to the soul like the chamberlain or interpreter with the king. This is the faculty of speech, which informs the soul of the meanings of what it thinks concerning the sciences and other issues. Its channel is from the throat to the tongue. And one of them is for the soul like the minister for the king, who helps the king in governing the kingdom and ruling the people. This is the faculty through which the soul produces writing and all the other crafts. Its place is in the hands and in the fingers. These are the five faculties, which are like co-operators in what they receive of the forms of known things. (R II: )

Speech is once again present among the faculties, and the intellect as such is not treated at all. As we can see, the soul again appears as a king, whose minister is in this comparison exceptionally said to be the productive faculty. The soul is seated on the royal throne in al-Qazwini's comparison as well, but in it the intellect acts as the minister:

The soul is in the body like the ruler in the kingdom. The faculties and members of the

body are servants of the king. [...] The intellectual faculty is like the sincere and reasonable

minister. Desire is responsible for the food of other servants and the anger is the commander of the police, who is a cunning and disloyal servant, but acts loyal to the king. Anger's counselling is lethal poison and it is always fighting the sincere minister.

The imaginative faculty in the front side of the brain is like a post officer to whom senses bring information. The faculty of memory, which resides in the back of the brain, is like a treasurer and the tongue is like a translator. The five senses are its spies, each of them commanded to inform on one of the regions: to the eyes has been commanded the world of colours, to hearing the world of sounds, and so on. They are informants on the areas on which they gather knowledge and then they transmit it to the imagination, which is commander of the post and intelligence agency. He hands the information

over to the treasurer, who preserves it so that the soul may use when and what it needs of it in the administration of his kingdom. (al-Qazwini (a): –)

As will be seen, for al-Ghazali, the main focus in the explicit comparisons is rarely on the description of epistemological ideals, but he also refers to this kind of analogy in *Aja'ib al-qalb*:

So the perceptive part of man dwells in the heart, as a king in the midst of the brain acts as the master of his couriers, for the reports of sense perceptions are gathered therein. The faculty of retentive memory, whose seat is the back of the brain, acts as his storage keeper. The tongue is his interpreter and the active members of his body are his scribes. The five senses act as his spies, and he makes each one of them responsible for a certain domain. Thus he sets the eye over the world of colours, hearing over the world of sounds, smell over the world of odours, and so on for the others. (al-Ghazali (c): – , trans. Skellie, in al-Ghazali (d): )

After this, it is mentioned that the information gathered by the senses is first taken to the imagination, secondly, to the memory to be stored and then further to the intellect. The king himself decides which pieces of knowledge will be used and for what purposes: for good purposes or for bad, such as his enemies anger and desire. The king himself is ultimately responsible for the fortune of his kingdom.

While the intellect, the rational soul or perception leads the processing of knowledge, in the comparisons the other spiritual faculties stand as officers and hosts. They are placed in a hierarchy below the highest one and their different relationships to each other are clear. Sometimes the acts and movements of the body take the lower positions as inhabitants or servants in the city.

Although these comparisons clearly express the manifold nature of the soul and the tasks of the faculties in processing knowledge, they also include the aspect of the ideal in the process of perception. This is especially the case in the *Rasa'il*, in which knowledge is considered essential in human perfection.

These kinds of analogies which allude to the faculties of the human soul could also be examined from the perspective of the commonwealth. In many cases, excluding al-Farabi, Islamic philosophers seem, however, to consider the sociological approach as secondary. Even though the viewpoint of the commonwealth might provide some interesting insights into the philosophy of the Islamic thinkers and to the *Ikhwan* as well, the focus of this study is on the role of man.

### .. Hosts of the Heart

If the *Ikhwan*'s concentration is on the epistemological perfection of a human being and the explicit spiritual comparisons are harnessed for expressing ideals attached to acquiring and processing knowledge, al-Ghazali's intention is more clearly to articulate the ethical side of the mystical perfection and the mastering powers which possibly lead the soul astray. Thus, the incentive faculties of anger and desire and their contradictory position in the human organism are in focus in many of al-Ghazali's comparisons.

In *Aja'ib al-qalb*, al-Ghazali examines the human faculties describing them as the hosts of the heart. The basic idea is that "the heart is the king and the hosts are servants and helpers, and this is the meaning of the 'host' (*al-jund*)."

((c): ) The number of these hosts is, according to al-Ghazali, only known to God, which he derives from the *Qur'an* (:).

In the second chapter of *Aja'ib al-qalb* ((c): –), al-Ghazali presents some distinctions between the hosts. One is made between the external and the internal hosts. The former are perceivable by the eyes while the latter cannot be seen. The external hosts are attached to the body parts. They are simply subjugates to the heart, with no ability to rebel against it. Hence, their relationship to the heart is explained to be like that of the angels – who unlike human beings have no free will – to God.

Orders for the external hosts come from the internal hosts and these appear in couples. One of the internal hosts is the host of desire, which the human being needs, for instance, to procure food. It has external counterparts in the hands and other members of the body, which do the practical, physical work in procuring food. In order to drive away the destructive powers, the heart needs the internal host of anger, which again has its external counterparts in hands, legs and other members and, if needed, as reinforcement some instruments outside the body, like

weapons. Lastly, there is a host for gaining knowledge, which includes as its inner part the five senses and as its external part the bodily members attached to them, such as the eyes and the ears.

After this, the hosts are divided into three classes, which each have their own impulses and locations in the body. The first one, including desire and anger, aims at seeking desired things and driving away the undesired impulses. Its driving force is the will (*irada*). The second host, which executes the aims of the first by the use of body parts and members, is located in the muscles and tendons. It is driven by strength (*qudra*). The faculties pertaining to the third class are like spies gathering information, and they are called knowledge (*.ilm*) and perception (*idrak*). Perception has the outer aspect, which means senses which are attached to the parts of the body, and the inner aspect is located in the brain. This inner aspect consists of the cognitive faculties: the imaginative faculty, memory, common sense, imagination, reflection, recollection and memory.

Usually the comparisons are images of the battle between two hosts of the heart – the first host of knowledge (*al-.ilm*), wisdom (*al-.ikma*) and reflection (*attafakkur*), and the second host of anger (*al-gha.ab*) and desire (*ash-shahwa*) – fighting over the governorship of the soul. The ideal state would be the peaceful dominion of the first, but in the majority of human souls desire and anger do not succumb to the domination of the higher parts of the soul. Even if all the hosts also have positive effects on the human being, especially the lower parts of the soul often work against the purposes of the soul.

In the third chapter of *.Aja.ib al-qalb*, al-Ghazali ((c): ) clarifies this battle with three exemplary comparisons. The first resembles epistemological city-state comparisons. It describes the human body as a kingdom, whose king is the soul. The intellectual reflective faculty (*al-quwwa al-.aqliyya al-mufakkira*) is the sincere advisor and intellectual minister. Its faculties and members are craftsmen and businessmen of the city. Desire is the evil slave bringing food and supplies to the city, anger and ardour (*al-.amiya*) the chiefs of police. Desire is described as evil, which plays the role of a sincere advisor for the king aiming at lessening the power of the other adjutants of the ruler. Such conspirators are totally absent in the comparisons of the *Ikhwan*, but in al-Qazwini's comparison (see ..) anger is in a similar role.

In the second example, the body is again described as a kingdom, but the position of the ruler is now given to the intellect, which al-Ghazali defines as perception (*mudrik*). Perceptive faculties (*al-quwa al-mudrika*) – meaning the external and the internal senses – are troops and helpers of the body. The members of

the body are inhabitants of the kingdom. Because the soul commanding evil, i.e., the lower soul of desire and anger, is like an enemy striving to destroy the city and its inhabitants, the body turns into a battlefield and the soul into a place where troops are stationed.

The third example explains the same configuration through another kind of analogy emphasizing the dichotomy between positive and negative effects of the incentive faculties. The intellect is described as a horseman gone hunting, while desire is his horse and anger is his hound. If desire and anger recognize their roles as servants of the intellect, like the good horse and hound submit to their master, they work together for the same goal. Otherwise, evil forces take over.

The comparisons of al-Ghazali are more realistic than idealistic: although the ideal state is also explained, the basic idea is to describe the conflict between the lower and the higher soul. In al-Ghazali's comparisons, opposite forces that have distinct interests concerning the state of the soul are in a prominent position. In this way, although the comparisons transmit the model of the ideal way the faculties should work, they appear as descriptions of the state of the majority of human beings.

A similar stance as in al-Ghazali's comparisons can be found in Ibn 'Arabi's *Tadbirat*. At the end of the third chapter (Ibn 'Arabi: ), which describes the way the human kingdom works, it is said that because in the kingdom ruled by the intellect there are different kinds of people, there is a continuous war between the opposing forces. The armies of this war are described later in the work, for instance, in chapters –. In the closing of the th chapter (Ibn 'Arabi: ), one is advised to rule his armies and to be safe at the centre of the human kingdom, namely in the heart.

## .. A Journey through the Human Kingdom

In an allegorical story which appears in the sixth chapter of Suhrawardi's *Fi 'al-ahiqat al-ishq* (Suhrawardi (c): –), a man is given advice about his journey to a city in which he is to enter a three-storied castle, pass through five gates and enter the woods where there are beasts. Suhrawardi himself does not explain the allegorical meaning of the story and without an anonymous commentary of an early edition of the text its meaning would be left rather obscure. Read through the lenses of this early commentator, the story appears as a declaration of the variety of the human faculties and an expression of the right path of a human soul.

Firstly, the macrocosm of the universe is paralleled with the human microcosm. There are nine heavens, which are described as a nine-storied pavilion,

above which there is a cupola, “the City of the Soul”. As a guard of this city, there is a young old man Jawed Khirad (Eternal Wisdom) who represents the Universal Intellect. Whoever wants to reach that city needs to ask the way to the smaller world, which is explained to be the microcosm of the human body. In the inhabited part of the city, which is in the north, one finds a three-storied pavilion, which is the brain. The cognitive faculties are found in these storeys: in the first, there is Water, which stands for common sense, and Fire, which is the imagination (khayal). The one entering the city will encounter all the tricks and deceptions of the imagination, and, for this, he is advised to urge his horse to the next storey. There he faces Wind, which is the estimation which tries to lead one astray. Another meeting takes place in the second storey, this time with Vapour, meaning the imaginative faculty (mutakhayyila). Vapour is a two-faced creature just like its counterpart among the cognitive faculties: it knows evil things such as necromancy and magic, but also beautiful things. In a similar manner, the imaginative faculty under the governance of the intellect is like an angel leading one to good things, and it is called reflection. When it is ruled by deceitful estimation, however, it leads to bad things like devil does, and it is called imagination. For this, the one entering the city is counselled to frighten those in the second storey with a sword, which is an allegory for “the sword of knowledge”. In the third storey, the enterer will encounter Earth, which is the memory of moderate nature, never misappropriating things transmitted to it.

### Suhrawardi

first describes the cognitive faculties and their functions and only after that the lower, outer senses. After these three storeys the visitor comes to five gates, which are the five senses: sight, hearing, smell, taste and touch. The first three gates have two doorways which refer to their locations, the fourth one just one location, which is “wider than the other three. Inside is a pleasant spring surrounded by a wall of pearl. In the middle of the spring is a divan that moves and on it sits someone who is called the Taster.” (–) The Taster is able to differentiate between the four “different things”, which in the commentary are explained as elements with a mention of tastes being also four in number. However, it seems more probable that the tastes are exactly what Suhrawardi here allegorically refers to: the four tastes appear quite often in the groups of four paralleled with the first thing appearing in fours, the elements (see ..). Touch, which comprises all senses, is taken to a special position, as Suhrawardi also does in the .ikma. The touch is explained to surround the whole city. This is due to its location in the skin that is described as a carpet on which touch sits. In this context, Suhrawardi’s approach to the senses is overwhelmingly physiological and the comparison emphasizes their physiological aspects and locations.

After this the visitor goes to the city forest, which stands as the heart. There

he sees fire, meaning, according to the commentary, the stomach, in which are found the seven corporeal faculties. The visitor meets them there working by the fire: the attractive faculty is sitting next to the fire cooking, digestion inflames the fire, the retentive faculty waits for the food to be cooked and the excretory faculty separates the good parts from the bad. The last one, described in the commentary as growth, is represented as a “very tall person” who “stands by and seizes by the ears those who have finished eating and pulls them up” ().

In the forest of the heart there are two beasts, a lion and a boar, which stand for the faculties of anger and desire. The boar is dedicated to stealing, eating and drinking, paralleling the activities of desire, which is dedicated to seeking out sexual pleasures, the lion to killing and tearing, which stands for the resistance and vengeance exercised by anger. He who wanders in the kingdom is advised to tie these beasts with the lasso of the intellect, after which he should make his horse leap out of the nine barriers, leaving the microcosm, outside of which he will find the spring of immortality.

If the comparisons presented in the previous subsections were primarily descriptions of the process of acquiring knowledge or ethical ideals, the place and motivation of the allegorical story of Suhrawardi

is not equally easy to define. It

has features of various kinds of comparisons. It examines, on the one hand, the epistemological views. Like many comparisons concentrating on epistemology, it sets as sentinel the intellect, which also occupies the key position in the salvation of the soul. The story lists the faculties of the human soul dividing them into four groups, proceeding from the inner to the outer senses, and then from the corporeal to the incentive faculties. It also shows the dichotomised nature of many of them, especially in the case of the inner senses. The description of the faculties is in accordance

with Suhrawardi’s description of the faculties in the .ikma. A noteworthy difference with the epistemological comparisons treated above is that in Suhrawardi’s story the relationship between the classes of faculties – their hierarchies and co-operation with each other – is not clear or explained. By contrast, the inner and outer senses and the corporeal faculties appear independently in different parts of the human kingdom. Thus, the holistic and hierarchical nature of the human being, which is usually the prevailing theme in the epistemological comparisons, is almost completely absent.

On the other hand, Suhrawardi’s story is a description of man as the microcosm and a story of the spiritual development of an individual man who passes through all parts of his soul in order to reach freedom from these ties to the earthly. The last battle is located in the heart, and, as in al-Ghazali’s comparisons,



those needed to be put in their place are the incentive faculties. In Suhrawardi's story the ideal leader of the process is the intellect. Unlike the other descriptions, the intellect is located in the heart and is in this way treated separately from the cognitive faculties described at the beginning of the story. The attachment of the physical heart to the intellect is a characteristic in common with al-Ghazali and is clearly a mystical feature.

In general, the wide use of explicit comparisons in descriptions of the human soul and its faculties indicates that the spiritual in the human being is defined as a holistic sum of these parts and faculties. As will be seen, such a definition of the spiritual aspect of man is supported by the Ikhwan and – to some extent – by al-Ghazali also in the context of self-knowledge. Concerning the definition of the real essence of humanity in explicit comparisons and allegorical stories in general, the ruler of the city-state is naturally an essential theme. This position is granted most often either to the heart, the soul or the intellect. As for the Ikhwan, the variable leader's role between the soul and the intellect is logical, since, in the light of their epistemological views these terms otherwise overlap. Al-Qazwini follows the Ikhwan in his nominations of the ruler. Although it would be tempting to draw a line in this between the epistemologically oriented and the mystic-ethical analogies, the rulers seem to change haphazardly. In al-Ghazali's writings, the heart is usually named as the ruler, but at times he places the intellect in this position, which is also the case in Suhrawardi's allegorical story.

The roles given to other faculties vary and the most important general findings have to do with the powers included in them. In the epistemological comparisons the senses and cognitive faculties are almost always in the centre and even the Ikhwan, who are not that clear about their categories concerning the faculties of the human being, are seldom interested in the corporeal faculties of the human being in these comparisons. Incentive faculties, which play a key role in ethically oriented and mystical comparisons, appear only in side roles in the comparisons of the Rasa'il.

As against explicit physiological comparisons, the most important difference is the use of comparisons to express the ideal state of a human being or a way to achieve perfection. In some comparisons the educational aspect is central and especially al-Ghazali employs Platonic comparisons to express his ethical views concerning the life of a mystic. The normative tone in explicit comparisons of the Ikhwan should not be underrated either, although their concentration is on the process of knowledge. Taking into account the importance of knowledge in the work and its obvious key position in their view of human perfection, descriptions of the right kind of process in the achievement of knowledge are inevitably loaded with ideals. In Suhrawardi's allegorical story, the aim is evidently to describe

the ideal journey of the soul through the bodily kingdom, meaning the earthly life of a human being as it should go.

The greatest difference between al-Ghazali and the other two is, however, the almost complete absence of descriptions of the possible difficulties and failings in the process of perfection in Suhrawardi's and especially in Ikhwan's comparisons. Al-Ghazali's ethical comparisons also describe the way the process can fail to oppose the positive and negative faculties of the human being, while in Suhrawardi's journey the dangers and annoyances are mentioned but avoided. The epistemological comparisons, on the other hand, seldom pay any attention to the process of knowing of the ignorant and foolish, who simply reflect the process as it is desired to proceed.

While structural microcosmism was the most obvious form of the analogy in physiological explicit comparisons, in the spiritual ones the holistic tone is obvious especially when the human being is compared with a city. Although they concentrate on describing the human being, comparisons express the manmade order of a city or royal troops as a replica of the one appearing in the human soul.

## . THEORY OF KNOWLEDGE AND MICROCOSM

If the epistemological aspect is strongly present in the explicit spiritual comparisons presented above, knowledge and theoretical ideas attached to it are connected with microcosmism in many other ways as well. An interesting passage concerning this is the story of the wise king in the epistle On the Saying of the Wise that the Human Being is a Microcosm, which brings together indications of many epistemological ideas connected with the microcosm-macrocosm analogy in the Rasa'il. The Ikhwan illustrate their views continuously with metaphorical narratives in which they often employ Indian and Iranian literary traditions. This story is dedicated to an explanation of the human being as al-Law. al-Mahfu., the Well-preserved Tablet:

There was a wise and noble king, who had small children whom he loved and who were dear to him. He wanted to teach and educate and drill them before attaching them to his court, because only the sophisticated, educated, righteous and immaculate suit the royal court. The king thought it wise and judicious to build them a castle (qa.r) in a very solid way. He appointed to each of them a room (majlis) and wrote on the walls of the rooms all the knowledge he wanted to teach his sons, describing all the things in which he wanted them to be educated. Then he settled them to this castle, each to his own part (.i..a) and appointed to them servants, slave girls and slaves. He said to his sons: "Consider what I have formed in front of you, read what I wrote for you and contemplate

what I explained to you. Think about these things so that you learn their meanings and become good, excellent and pious, so that I may bring you to my court to be among my boon companions, respected, happy and blessed with prosperity as long as both I and you remain. (R II: )

Sciences that were painted on the walls are divided into six categories: astronomy and geography form the first two groups. The third group consists of medicine and natural sciences including sciences concerning animals, plants and minerals and their uses. The fourth is handicrafts and trade, which includes human civilizations and descriptions of cities. The fifth science is about religions, religious laws and traditions. The sixth includes political sciences and knowledge concerning administrative affairs. At the end of the story, the Ikhwan explain the inner meaning of the narrative:

The wise king is himself God, be he exalted. The small children are the humanity (al-insaniyya) and the built castle is the whole sphere. The prepared rooms (majalis) are the human form (.urat al-insan). The education (al-adab) described in it is the marvellous structure of the human body and the sciences written in it are the faculties and knowledge (ma.rifa) of the soul. (R II: )

This story can be seen, on the one hand, as a description of the wonders of the human being, both body and soul. At the moment of creation, all sciences, corresponding to the faculties and knowledge of an individual soul, were depicted in the human form. In this way, the knowledge and abilities of an individual soul correspond to the sciences in their entirety, and the abilities and knowledge of an individual are manifold like the different branches of science concerning the whole world. Like the Well-Preserved Tablet which includes knowledge concerning everything in the universe, the human form includes all faculties and knowledge. The knowledge included in the human body is paralleled with outer, adab-type knowledge, while the knowledge of the soul is described as the inner gnosis ma.rifa. In this form, the story of the wise king can be seen as a continuation of the short descriptions of the relation between the soul and the body (see ..) presented immediately before it in the same epistle.

If the microcosmic idea is taken more literally, which I would prefer, the story of the wise king can be interpreted to be closely linked with certain major themes in the epistemology of the Ikhwan. All of these themes are somehow connected with the idea that the human being – his soul or his form – in his pure and perfected

state includes forms of everything and, thus, reflects reality as a whole. This idea is closely related with the Platonic mirror metaphor, which has been explored in the *Rasa.il* by de Callatay (a). He considers the mirror metaphor to be in many ways linked with the microcosmic themes of the work. According to de Callatay, the metaphor occurs in its explicit and implicit forms in all four parts of the work. As he points out, an explicit appearance of the mirror metaphor can be found in the 4th epistle, where the perfected human soul is described as a polished and planar mirror, which in its luminosity reflects the realities of the forms in the world, while an image in an unpolished and curved mirror is distorted (R

IV: ).

In this subsection, I will examine the themes which appear in the story of the wise king from three perspectives. First of all, it emphasizes self-knowledge in the relationship between man and God: the education and sciences, which man is encouraged

to acquire, can be found by contemplating the human body and the human soul. After considering them, a human being can enter the godly presence: this also indicates the position of self-knowledge to be, if not knowledge leading to salvation, at least knowledge related to it. The story also emphasizes the close connection between self-knowledge and microcosmism. On the other hand, the story of the wise king can be examined from the perspective of Platonic epistemology, which in Allers's classification appears as psychological microcosmism. The third theme related to the story attaches it to the Sufi tradition of human perfection.

## .. Self-Knowledge

In the epistle *On the Saying of the Wise that the Human Being is a Microcosm* (R

II: ), immediately before the story of the wise king, the Ikhwan describe the human body as a library and man as a librarian. A human being forming a microcosm presents an image of man as a source of knowledge. Though the microcosmic idea in its epistemological forms approaches man mostly as a spiritual being, in this context the physiological aspect of man is included, too: the human body as a microcosm is thought to form an important source of knowledge of the surrounding material realm. In the *Rasa.il*, self-knowledge often appears in the context of microcosmism, and self-contemplation is recurrently related to man's position as the microcosm. I will firstly scrutinize the definition of self-knowledge and the definition of "self" in this context. After that, I examine the goals of self-contemplation. Lastly, I suggest a way self-knowledge may be related to divine knowledge in the case of the Ikhwan.

## ... Knowledge of the Self, Knowledge of the Soul

The Ikhwan emphasize on several occasions that self-knowledge is the beginning

of all knowledge, a basis for all science (e.g., R II: ). In the 2nd epistle (R III: ), it is mentioned that it is “ugly of us to demand knowledge of the realities of things without knowing ourselves”. In the epistle on the structure of the body (R

II: –), the Ikhwan compare the one aspiring to other types of knowledge without knowing himself with a famished person feeding others, a sick person curing others, a naked person clothing others and a lost person showing the way to others. Self-knowledge is obviously a necessary step to take before reaching for other kinds of awareness, but what do the Ikhwan mean by this knowledge and by the “self” that is to be known?

The term self-knowledge .ilm an-nafs is a rather problematic term in Arabic on account of its ambivalent meaning. On the one hand, it can be translated as self-knowledge or, on the other, knowledge of the soul. It is not possible to draw a strict line between these two – contrarily, the same authors use the term to refer to both of them. This is also the case in the Rasa.il.

In the classification of sciences, which the structure of the work follows, “sciences of the soul and intellect” (an-nafsaniyyat al-‘aqliyyat) form their own class of knowledge between natural and theological sciences. At times the Ikhwan seem to use .ilm/ma.rifat an-nafs synonymously with this branch of sciences. As an illustration, in the first epistle (I: ) the Ikhwan refer to “knowledge of the substance of the soul” (.ilm jawhar an-nafs), describing this kind of knowledge as a source for theological knowledge. Later in the same epistle (I: ) they refer to mathematical sciences as a door that leads to knowledge of the substance of the soul.

More often, however, they seem to define .ilm/ma.rifat an-nafs as knowledge of the self. This is obviously the case when they divide self-knowledge into three levels (see, e.g., R II: ). The first or the lowest level of self-knowledge is the knowledge of oneself as a corporeal being. The second level of self-knowledge concerns the soul and it is “the reflection of dominance of the soul over the parts of the body and reflection of its faculties: which are they, how are they, and what are their special characteristics” (R II: ). Finally, the third and the highest level of self-knowledge is the understanding of the whole that the two prior levels form

– the human being as a combination of the body and the soul. This includes “the morality, activities, movements, skills, works, sounds and so on” (R II: ).

The latter definition of self-knowledge is of interest for the definition of the “self”. If self-knowledge also has as its object the human body, like the Ikhwan seem to claim, the corporeal aspect would be included under the notion of the self, which is usually defined to only consist of the spiritual in man. Regarding the

spiritual aspect of man, this definition of self-knowledge implies that the spiritual in man is simply the sum of his faculties. In the context in which the Ikhwan (R II: ) describe the cognitive faculties and their tasks they mention that:

Know, oh brother, that when the intelligent, the understanding one contemplates these (cognitive) faculties preceding recollection, their qualities, emanation to the various body-parts, their use in the perception of the sensible things, the way they produce images of the objects of knowledge and how the soul lets them know about all of them in all of its states, they are visible to him from soul to soul.

Although the Ikhwan do not mention self-knowledge in this context, this and the definition of the second level of self-knowledge above indicate the importance of knowing the soul as a sum of its parts. When an important aspect of self-knowledge is understood in this way, comparisons scrutinizing details attached to the faculties of the soul are shown in the light of self-contemplation as instruments for that. This can also be deduced from the structure of the work: often, for instance, in the epistle On the Structure of the Body (R II: –), before going into the comparisons, the Ikhwan prime the reader with an admonition to know himself.

In Kimiya-yi sa.adat, al-Ghazali mentions contemplation of one's own body as a source of divine wisdom:

An important part of our knowledge of God arises from the study and contemplation of our own bodies, which reveal to us the power of wisdom, and love of the Creator. His power, in that from a mere drop he has built up the wonderful frame of man; his wisdom is revealed in its intricacies and the mutual adaptability of its parts and His love is shown by His not only supplying such organs as are absolutely necessary for existence, as the liver, the heart, and the brain, but those which are not absolutely necessary, as the hand, the foot, the tongue, and the eye. To these he has added, as ornaments, the blackness of the hair, the redness of lips, and the curve of the eyebrows. Man has been truly termed a “microcosm” or little world in himself and the structure of his body should be studied not only by those who wish to become doctors, but by those who wish to attain to a more intimate knowledge of God, just as close study of the niceties and shades of language in a great poem reveals to us more and more of the genius of its author. (al-Ghazali (f): , trans. Field)

Thus, al-Ghazali would seem to define knowing one's body as a form of self-

knowledge. In general, however, for al-Ghazali the “self” is primarily a spiritual concept. In the opening chapters of *Aja.ib al-qalb*, al-Ghazali ((c): –) unambiguously affirms that the “self” is the heart, meaning the true essence of the human being. This essence of humanity is subtle, divine and spiritual (*la.ifa rabbaniyya ru.aniyya*) and its location in the material world is the physical heart. As Kukkonen (: –) points out, al-Ghazali defines as the first step of self-knowledge the understanding of “the hosts of the heart”, meaning the sum of the faculties of the human soul. These hosts comprise the lower part of the twofold concept of the self for al-Ghazali. In addition to this lower, practical intellect, which is the active part of the self, man has theoretical intellect, which forms the passive, universal part of the self facing upwards.

### ... The Goal of Self-Contemplation

As the microcosm, man can, by contemplating himself, obtain knowledge concerning the world around him and understand its structure and functions. This appears in the th epistle:

When the Creator, his exaltedness be exalted, wanted to inform the human soul of the treasures of his sciences and to show it the world in its entirety, he knew that the world is wide and big and that it would be impossible for a man to travel everywhere in order to see everything; human life is so short in comparison with the age of the universe. He thought it wise to create a microcosm, in which the whole macrocosm is summarized. He shaped in the microcosm everything that is in the macrocosm, placed it in front of him and showed it to him. (R II: )

The Ikhwan find the correspondences natural and do not present any explicit reason for the parallelism between man and the universe. As de Callataÿ (a: ) points out, this passage seems, however, to imply an explanation for the analogy: man was created as the microcosm, because God wanted to make all knowledge available for him.

Later in the same epistle, the Ikhwan list some aspects of reality, which are revealed through microcosmic man:

The wise have said that the human being is a unity after all plurality, like the Creator, his praise be exalted, is unity before all plurality. He is called a microcosm because of all that we have mentioned: the marvels of the structure of the human body, the wonders of the uses of his soul and all the arts, sciences, morals, opinions, ways, doctrines, actions, works, sayings and other corporeal and spiritual effects that he shows in his whole construction. (R II: )

As we can see, the microcosmic man includes every created thing, which makes him a source of knowledge concerning both the spiritual and the corporeal created world. Thus, the Ikhwan seem to connect the knowledge achieved through self-contemplation primarily with the created world. This is also supported by their threefold division of self-knowledge presented above, according to which knowing oneself includes both the body and the soul: a man who reaches true self-knowledge knows himself as a combination of the corporeal and the spiritual.

Exclusion of the divine presence from the sphere of self-knowledge can also be seen in the explicit comparisons. Despite a few exceptions, one of them presenting the Imam in the role of the intellect and another presenting God as the rational soul (cited in ...), the Ikhwan almost always restrict their comparisons to the sphere of the created. Al-Ghazali (e.g., (c): ) and Ibn .Arabi (e.g., ), however, quite often include such divine elements as the Throne (al-.arsh) and the Footstool (al-kursi) in their explicit comparisons.

I read wa.datun rather than wa.dahu as in Bu.rus al-Bustani's edition.

Self-knowledge is, however, attached to the knowledge of God in the Delphic Maxim, which recurs in the Rasa.il. It appears, for instance, in the form: "who knows himself, knows God" (see, e.g., R I: , III: and IV: ). This maxim, which in the Islamic tradition is known as a .adith, was, as Daniel De Smet (: ) indicates, thought in the early sources to be connected to the .abians of .arran. It is not exceptional in the Islamic tradition to link the Delphic maxim with microcosmism and, in this way, emphasize that the final goal of self-contemplation is knowledge of God (see Takeshita : – and Altmann : –). In the Rasa.il, however, microcosmism and the Delphic Maxim do not appear connected to each other.

Altmann (: –) mentions al-Ghazali among those explicitly linking self-contemplation with the microcosmic idea and divine knowledge. This can be seen in the passage from the Kimiya-yi sa.adat cited above. In it, the goal of examining one's own body is attached to divine knowledge. In the Mishkat, alGhazali ((b): ) explains that Adam was created in the form of the All-Merciful and given the form which brings together everything in the cosmos; this form is "divine handwriting, which is not written with letters". After that it is mentioned that "if it were not for this mercy, the human beings would not be capable of knowing their Lord, since one knows one's Lord only by knowing oneself" (trans. Buchman).

In the Tadbirat (Ibn .Arabi: –), the author explicitly links self-knowledge with knowledge of the attributes of God. After citing the Delphic



Maxim it is said that the same attributes appear in both God and man. Ibn .Arabi adds, however, that the secret of these attributes, which reveal the real essence of God, cannot be achieved through knowing the attributes only. He clarifies that the layers of reality, higher and lower, can be found in the human being and that out of the attributes of God can also be found elsewhere in the world, while the th can only be found in the human being.

### ... The Self as a Mirror of the Divine

As we saw in the story of the wise king, the Ikhwan seem, however, to assume that God created the correspondence between man and the universe for educational purposes concerning not only the sphere of the earthly. In this way, the story connects self-knowledge with salvation. Hence, an essential question in the case of the Rasa.il is that if the knowledge acquired through self-contemplation refers to earthly knowledge only, what is its relationship with salvation and knowledge concerning the divine?

An answer to this may be deduction of the higher type of knowledge from the lower. In general, according to the Ikhwan, knowledge of things is at least partly achieved through analogies: in the second epistle (I: ) they refer to analogies (amthal) at the earthly level that are used by the wise to refer to things at the higher levels. These contexts do not explicitly refer to the human being as the other counterpart of the analogy. In the context of theological sciences, however, the analogy is explained to appear between the human being and the universe: the Ikhwan claim to have found one basis and analogy that summarizes the whole of reality and contains all knowledge, namely the human form.

One who claims to master the real sciences and claims to be able to answer well the questions we posed above has to be asked to answer these questions with one basis and one analogy. He can only do this if he takes as a basis the human form, from all forms

– spheres, celestial bodies, elements, animals, plants, et cetera. Whichever he may choose from the other forms, he would never be able to find in it the analogy of every existing thing. He can only find all the answers in the same way that we have used as analogies and which we have employed. (R IV: )

This citation indicates the way in which one can attain real knowledge of the essences of things by means of the human form. As de Callataÿ (a: ) points out, it is noteworthy that in this passage the analogy is specifically about the human form – not the human soul alone. Like in the story of the wise king, the human being is like the Well-Preserved Tablet, al-Law. al-Mahfu., on which all the sciences and wisdom have been drawn, and it therefore includes all knowledge.

The general idea of one kind of knowledge being deducible from another kind of knowledge is present in the *Rasa.il* in many ways. The authors refer to the Hermetic idea that “the lower is a sign of the higher” (e.g., R II: ) and it occurs at times in the context of microcosmism as well. The primary emphasis of this maxim is on the ontological connection between different levels of reality, but it can be interpreted as an epistemological argument as well.

The relationship between different levels of knowledge is more explicitly present when the concepts of the manifest (.ahir) and the concealed (ba.in) are involved. These concepts prevail in all Isma.ili thought and Sufism and appear in the *Rasa.il* as well. As two aspects of religion they also occur connected with a form of elementaristic microcosmism and in the 2nd epistle (R III: ), where it is said that because the human being is a combination of the material and the spiritual, the rulings of the religions and divine ordinances have two aspects: manifest and concealed. This division appears at the level of knowledge as well. According to the Ikhwan, “God made all material and sensible things parallels and signs of the spiritual and intelligible things. He made the way of the senses ladders and stairs to ascend to the knowledge of the intelligibles, which is the highest goal for a soul to attain.” (R III: ) In this way, knowledge of the material world can lead to knowledge of the real essences of things and spiritual knowledge can be derived from knowledge concerning the material world. Thus, when it comes to self-knowledge as defined by the Ikhwan, it might be said that we are talking about divine knowledge, but only indirectly.

This is also supported by definitions of science in the *Rasa.il*. Real knowledge can be attained, according to the Ikhwan, through philosophy and logic as well as through religious sciences. The importance of scientific knowledge and rationality is evident and can be perceived from the manner the Ikhwan arrange their work in the form of a scientific encyclopedia. In spite of this, the Ikhwan find no contradiction between revelation and rationality. According to the *Rasa.il* (R III

: ), they share the same divine source and both aspire to the same goal, the purification of the soul. In the *Rasa.il*, the scientific disciplines have been organized into a strict hierarchy according to which they should be studied. The lower discipline is said to be a reflection of the one above it (see, e.g., R I: ). In this way, the hierarchically higher discipline always represents the real essences of things more clearly than the ones below it, though both are images of the same reality. This is explained concretely in the case of mathematics and its research objects. In their first epistle, in which the Ikhwan describe the qualities of numbers and their cosmological positions, they remark that one should start from .ilm al-.adad rather than other mathematical sciences. This is because such knowledge

is concealed in each soul potentially, and in the soul are the analogies (amthal) to all the sciences (R I: ). This passage may also imply that numbers are considered in the Pythagorean way to be similar to Platonic ideas and, as such, form a separate level of being.

If the previously presented view of the human being as an analogy is examined in the context of the sciences forming various layers corresponding to each other, the human being – and, for this reason, self-knowledge as a source of knowledge – could be seen as a layer of this system. Hence, even if the Ikhwan do not present their view as clearly as, for instance, Ibn .Arabi, contemplating oneself might in this way be a source in the acquisition of knowledge ultimately leading to its highest, divine form. This might be an explanation for the contradictory way the Ikhwan present the goal of self-knowledge being, on the one hand, strictly earthly and, on the other, connected with the divine gnosis.

### .. Knowing as Actualizing a Microcosm

Another possible interpretation of the story of the wise king is to take it as an expression of the epistemology of the authors. Microcosmism is relevant in various epistemological systems. It can be approached in the mediaeval theories of knowledge from two perspectives. Firstly, and most commonly, it appears as a result of intellectual perfection since a human being, who has achieved all knowledge, often forms a microcosm at the mental level. Secondly, in some, especially Platonic theories of knowledge, the mental microcosm in potential form is seen as a requirement for acquiring knowledge.

### ... Knowledge Making a Microcosm

Sari Nuseibeh (: –) divides the epistemological systems of Islamic philosophers into two groups: one closer to theological epistemology and the other following the Neoplatonic theory of knowledge. He mentions Ibn Sina (d. ) as a representative of the theological side. Nuseibeh characterizes the process of acquiring knowledge in theological epistemology as more subjective than in the Neoplatonic one. In Ibn Sina's system, the forms of the perceived objects drawn in the human mind are strongly dependent on the individual intuition and, for this reason, differ from the forms existing in the Active Intellect. As an example of Neoplatonic epistemology, Nuseibeh mentions al-Farabi. As is characteristic for Neoplatonism, in al-Farabi's system ontology and epistemology are bound together. The forms that man receives into his particular intellect in the process of acquiring knowledge are the real essences of things and are parallel to those in the Active Intellect. Thus, an intellectually perfect man is a reflection of the Active Intellect and includes the real essences of the objects of knowledge.

Although microcosmism is seldom explicitly mentioned in these contexts, in

both epistemological systems the particular intellect that has reached its perfection can be seen as the microcosm reflecting the whole universe. In the latter, the microcosm formed by the individual human mind reflects the Active Intellect objectively, while the theological epistemology adds a subjective level to it. In Allers's (: –) classification this kind of microcosmism pertains to the psychological microcosm-macrocosm analogy. Brague (: ) seems to refer to this interpretation as well when he characterizes the forms of the microcosmic idea appearing in the Arabic tradition but left out of his examination: “L’imitation du monde est transposée pour ne plus porter sur le monde sensible, mais sur le monde des idées. Il faudra «devenir le monde intelligible»” In this context, he mentions that some Muslim philosophers develop it and refers to Miskawayh (d. ) and to the al-Ilahiyat of Ibn Sina’s ash-Shifa. (IX: , ) in which Ibn Sina notes that:

(In the case of) the rational soul, the perfection proper to it consists in its becoming an intellectual world in which there is impressed the form of the whole; the order in the whole that is intellectually apprehended; and the good that emanates on the whole, beginning with the Principle of the whole (and) proceeding then to the noble, spiritual, absolute substances, then to the spiritual substances – (substances) that in some manner are connected to bodies – then to the exalted bodies with their configurations and powers, and so on until it completes within itself (the realization of) the structure of existence in its entirety. (Ibn Sina: , trans. Marmura)

Allers includes in psychological microcosmism theories closer to the Aristotelian model as well as the Platonic ones. He, however, accentuates the importance of the interpretation concerning universals in this context: Platonic realism, where the acquisition of knowledge is seen as the formation of real essences of things in the human mind, forms the most fertile ground for the psychological microcosm-macrocosm analogy. For this reason, the psychological analogy has been elaborated mostly by philosophers influenced by Platonism and especially Neoplatonism.

The epistemological system of the Ikhwan quite evidently stands as a representative of the same branch as al-Farabi’s in Nuseibeh’s twofold division. In the Rasa’il, there are some explicit references to the microcosmic position of the actualized human soul. As Baffioni (: ) remarks, “[i]n the encyclopaedia, science (or sciences) are usually defined (with slight differences from case to case) as .urat al-ma.lum fi nafs al-.alim (“the form of the intelligible in the knower’s soul”).” It seems clear that for the Ikhwan knowledge of everything would mean having the forms of all things known in the human soul, or in the intellect,

which the soul as a result of this process turns to: “It (the intellect) is only the human soul, once it became actually learned after it was potentially learned. And it became actually learned after the essences of things had been deduced within it by means of the senses, and the forms of their quiddities by means of cogitation and consideration.” (B: , trans. Baffioni, in B: )

### ... Potential Microcosm as a Requirement for Knowledge

It is characteristic especially of the Platonic branch of epistemological systems that without a potential microcosm in the human being – in his soul, intellect or heart – achieving knowledge would not be possible. This appears in the Platonic theory of anamnesis as a requirement of the potential forms or ideas of all objects of knowledge drawn in the human mind, before them being actualized as a result of processing knowledge.

If the story of the wise king is examined from the epistemological perspective, it could be related to the Platonic theory of anamnesis: God drew all knowledge into the human form in creation and, hence, the acquisition of knowledge is about the actualization of the objects of knowledge already present in the human soul. According to Baffioni (a: n. ), however, there is only one explicit reference to Platonic anamnesis in the *Rasa.il* (III: ) and it is seldom referred to in Islamic sources in general. Netton (: ) emphasizes that the actualization of the potential knowledge concealed in the human soul differs in the *Ikhwan*’s thought from Platonic epistemology in that, in the *Rasa.il*, there is no assumption of remembering something that would have been in the human mind before birth.

In the epistle on sensory knowledge (R II: ), the *Ikhwan* urge the reader to contemplate the reality around him, because all knowledge is potentially integrated into the human soul. They say that by examining the essences of things it is possible to actualize the human intellect. This is explicitly stated in the epistle *On the Saying of the Wise that the Human Being is a Microcosm*:

The virtues of the soul are completed only when it learns its essence (*dhataha*) and the reality of its substance. The virtues of its substance become clear to it only when it learns the states of its own world, which is the human form. This is because the Creator, be he praised, created the human being in the fairest stature (Q. :) and shaped him in the most perfect form. He made the human form the mirror of his soul, in order show in it the picture of the macrocosm. (R II: )

This passage may also be understood advising to self-contemplation. Thus, the epistemological idea of the potential microcosm in the human mind enabling the achievement of knowledge partly overlaps with the topic of the human being as a source of knowledge.

The Rasa.il is ambiguous about whether the potential microcosm at the level of the human soul concerns man as an individual or humankind collectively. There is a possibility that the Ikhwan refer in this context to the human archetype (see ..), whose form is the model for all human souls after him. Hence, it would not be an individual man whose intellect potentially reflects the whole universe, but man at the cosmic level. The human archetype, also known as Adam, knows everything in the universe, because, as mentioned in the Qur'an: God "taught Adam the names, all of them" (Q. :). Human beings collectively correspond to this archetype and therefore together they can know everything in the universe.

There are some passages in the Rasa.il which quite explicitly support this view. It is argued a few times that one soul would never have the capacity for all the sciences (.ulum), but they have to be pursued by all people together (e.g., R

III: ). In the nd epistle (R III: –), in a chapter which describes the Intellect, but also the difference between individual and universal beings, it is said:

The human form is a summarization (mukhta.ara) of all the animal forms and the human being brings in him together all the faculties of plants, the characteristics of minerals, the natures of the elements and the beings of the World of Generation and Corruption. All of these cannot be brought together in one individual, but they are divided into all individuals of this form.

One of the reasons for the differences between individual men is the different number of these things which appear in different individuals. The whole variety of activities, works and arts cannot be pursued by an individual human being. In the same context, "the form of the human forms" is said to govern all individuals and to be the Caliph of God on earth. The universal absolute man or the universal rational human soul is not explicitly mentioned, but all the elements of microcosmism which also appear in the description of the human archetype in the ninth epistle are listed. The nd epistle, however, concentrates on knowledge, which indicates that the Ikhwan may well aim to express that the position of the microcosm in this form does not pertain to an individual man but to the universal human archetype.

The requirement for the potential mental microcosm appears explicitly in .Aja.ib al-qalb ((c): –), where al-Ghazali explains the process of acquiring knowledge and places on it two conditions. Firstly, "you can never apprehend anything save that which has reached you", meaning that perceived things have to reach the intellectual level of existence in order to be known. This intellectual

level is the fourth in al-Ghazali's four degrees (darajat) of existence. The first is the al-Law. al-Ma.fu., which is prior to all corporeal existence. After that follows the real (.aqiqi) existence of the entities in the corporeal world. When things are perceived by a human being they become existent at the third, imaginative level, after which they reach the fourth level, intellectual existence in the heart. In this way, the perfected human heart becomes a reflection of al-Law. al-Ma.fu.. Acquiring knowledge is possible only – and this is the second condition given to the achievement of knowledge – if the images of objects of knowledge already exist in the essence (dhat) of the human being: “and were it not that he has placed an image (mithal) of the whole world within your very being (dhatika) you would have no knowledge of that which is apart from yourself” (trans. Skellie, in alGhazali (d): ). The way to explain this in the context of the four degrees of existence connects the question of acquiring knowledge with a more extensive ontological system of correspondences between different layers of reality and the idea that “the lower is a sign of the higher” (see above ...), which is closely connected with the psychological microcosm-macrocosm analogy.

Whether or not the story of the wise king is interpreted as an expression of any kind of theory of knowledge, it seems to claim two things: on the one hand, it connects the earthly knowledge and sciences to the divine knowledge of God, and, on the other hand, brings knowledge to the centre of human perfection. The prominence of knowledge in the spiritual development of a human individual is emphasized in the whole Rasa.il, and is also explicitly claimed in the th epistle (R III: ), which lists four conditions for the purification of the soul: the first is knowledge of the real essences of things and the other three sincere thoughts, true moral and virtuous character, and good deeds. Concerning the type of knowledge referred to in this context, it seems quite clear that the Ikhwan see all sciences as necessary steps in the path of perfection. This is expounded in the th epistle (R III: –), in which knowledge leading to salvation is described as spiritual knowledge, belonging to man for his soul, but the sensory knowledge, which is due to his corporeal aspect, is also mentioned as an absolute prerequisite for salvation.

## .. Microcosm and Mystical Perfection

The microcosmic idea is also relevant in some Sufi views on human perfection. In this subsection, I will take a brief look at two separate microcosmic themes in mystical philosophy and examine some similarities between these and the attitudes of the Ikhwan towards perfection as they express them in the story of the wise king.

## ... Spiritual Castle(s) in the Human Soul

Paralleling the human soul, the human being or the human heart with a house, pavilion, fortress – or castle – is usual in microcosmic contexts. As has been seen,

such references appear in addition to the Ikhwan, in al-Qazwini's, Suhrawardi's, Ibn 'Arabi's and also in al-Ghazali's works on various occasions. The idea of seven spiritual castles or seven rooms of a castle concealed in the human soul forms, however, its own tradition of microcosmism. It is popular in mediaeval Sufi literature, and in the previous research it has been found to be quite universal in mysticism in general. According to Luce López-Baralt (: –), it can be traced back to early Babylonian as well as Persian traditions. A corresponding metaphor is also employed in Jewish Hekhalot-writings, written during the fifth and sixth centuries. In the Islamic tradition, López-Baralt mentions Abu al-ʿIsa an-Nuri (d. 1032), Abu 'Amr al-Ghazali and Najm ad-Din al-Kubra (d. 1224) as examples of the elaborators of the analogy.

For Sufis, the castles or rooms of the castle stand for the stations (maqamat) on the way to the spiritual perfection. The mystic proceeds by passing through six of them and reaches the seventh castle, or the innermost part of the castle, in which he finds the Godly Presence. As a specific feature of the Sufi version of the spiritual castle metaphor, López-Baralt remarks that the stations are reached in a specific order and one is completed before passing to the next one. The castles or rooms of the castle are concealed in one's own soul and, in this way, in the allegory the human soul can be considered a miniature of its perfection, a microcosm. Similarly to the Sufi versions of the castle analogy, in the story of the Ikhwan the sciences have been divided into six groups, which the wise king paints on the walls of the castle. As was seen above, in the Rasa'il scientific knowledge is placed in an essential role in human perfection and scientific disciplines can even be paralleled with the stations in Sufi thought: like the Sufi stations, study of different scientific disciplines is seen as a well-organized process which proceeds from concrete to abstract disciplines. Similarly to the stations reached by a Sufi in his process of perfection, each of the sciences is studied and perfected in systematic order. As the Sufis reach the six stations before achieving the vicinity of the Lord, the human beings in the story of the Ikhwan perfect their knowledge in the sciences before entering the court of God. Both Sufis and the Ikhwan find a miniature for perfection in the human being and describe the soul as a castle. This is not to say that these two metaphors were necessarily related to each other, but since the Ikhwan use some expressions familiar to Sufis and are known to have influenced later Sufism as well, this approach to the story may open up new viewpoints on it.

### ... Actualization of the Microcosm as Polishing One's Heart

If for the Ikhwan the knowledge concealed in the human being includes all the sciences, and the actualization of the spiritual microcosm is about mastering the scientific disciplines drawn in the human soul in creation, for al-Ghazali and



many other Sufis, the actualization process is about polishing one's heart, which then turns into a reflection of the attributes of God.

In the 11th epistle of the *Rasa'il*, in which the Ikhwan (R II: —) attach the middle position of man to knowledge, explaining that just as the human being

from the perspective of this kind of microcosmism. In it, the states of the development of a

soul are explained with the story of a wanderer who travels from one city to another.

The

first is the city of darkness called *ammara* and, in the middle of it, there is another walled

city, which is called *lawwama*. Again, at the centre of this city, there is a city called *mulhama*, and after it another called *mutma'inna*. Each time after completing the virtues pertaining to the city, the wanderer may enter the next. In this last city, there is the district of

annihilation (*fana*.) and after losing his personal attributes, the wanderer hears the word "return". These stations in the development of the soul are similar to the stages of the soul

described by Suhrawardi previously in this same work (see note ) and also in accordance

with Qur'anic terminology.

is a combination of the spiritual and material, so the soul is cosmologically the middle being below the spiritual beings and above the merely material ones. The soul perceives the things above it by the senses and the things below it by the intellect.

As stated above, for al-Ghazali this middle position is an essential aspect of anthropology: the human being, more specifically the human heart, has two doors or aspects, one of them towards the material world and the other towards the spiritual world ((c): ). In al-Ghazali's case as well, this also applies to his epistemology: the former makes it possible for a man to achieve knowledge through the senses, the latter gives him an ability to see *al-Law*. *al-Ma'fu*. and, in this way, perceive the spiritual. The knowledge of the spiritual is the divine knowledge of the prophets and saints, while the sensory knowledge is that of the learned and philosophers. The difference between these two types of knowledge is explained with a story:

The story is told that once the Chinese and the Byzantines vied with one another before a certain King as to the beauty of their workmanship in decorating and painting. So the King decided to give over to them a portico so that the Chinese might decorate one side of it and the Byzantines the other side. [...] The Byzantines gathered together countless strange colours, but the Chinese entered without any colour at all and began to polish

their side and to brighten it. [...] On the side of the Chinese there shone forth the wonders of the Byzantine skill with added illumination and dazzling brilliance, since that side had become like unto a polished mirror by reason of much brightening. Thus the beauty of their side was increased by its added clearness. The care of the saints in cleansing, polishing, purifying, and clarifying the heart until the true nature of the Real shines forth clearly therein with utmost illumination is like the work of the Chinese. The care of the learned and philosophers in acquiring and adorning knowledge, and representation of this adornment in the heart, is like the work of the Byzantines. (alGhazali  
(c): –, trans. Skellie, in al-Ghazali (d): –)

In this story we can see that all divine knowledge can be found potentially in one's heart, which in its actualized state reflects the whole al-Law. al-Ma.fu., in this way forming a microcosm. If in the case of the Ikhwan this actualization process also requires knowledge acquired through the senses (at least as the first stage of self-knowledge), in al-Ghazali's story sensible knowledge is clearly another and completely distinct category of knowledge.

Ibn .Arabi develops psychological microcosmism extensively in his thought and the concept is closely related to the perfection of a human being. In his thought, like in Sufi thought in general, the analogy has the third level: God. According to Ibn .Arabi, God created the world in order to make himself known. The whole created universe is a reflection of his attributes. These attributes are summarized in the most noble thing among the created, the perfect man. Hence, a man who perfects himself – not solely but primarily by means of knowledge – becomes a microcosm and a reflection of the attributes of God. (Chittick : )

This is explained in the first chapter of the Tadbirat and is also attached to the human being as al-Law. al-Ma.fu. (Ibn .Arabi: –). It is first explained that God taught Adam all his attributes and the relationship of the soul to the microcosm is like the relationship of Adam to the macrocosm. Later it is noted that the human soul is “a summary of the secrets of the world (majmu. asrar al .alam), a copy (nuskha) of it on a small scale and a plan for everything in order for the human being to benefit from this” (). After that it is explained that the human being is the most perfect among beings and “it is in the prominence of this being that in its purest and most exalted form in the human being can be seen the Truth in its essence and its immaterial attributes, not those of the human being himself.” () For this, the all-encompassing human being is al-Law. al-Ma.fu., and the perfect man works as the guide (imam) in the search of truth.

Since divine attributes can be found in the human being, it is quite natural that the divine levels of reality are also present in explicit comparisons. Ibn .Arabi the microcosmic position of man, there are, as was seen, some similarities between the Ikhwan and these Sufi thinkers as regards human perfection.

## . MICROCOSMIC ARTS

The third level also appears in the analogies when the activities of man or the human artefacts are seen as microcosms. This kind of microcosmism can be found in the Jabirian Corpus as well as in the Rasa.il. The topic will first be examined through the idea of man imitating the Creator in his acts. Secondly, the influence of this kind of microcosmism in the overall definition of an artistic discipline will be examined through the Ikhwan's theory of music.

### .. Imitating the Creator

Often in their description of the human soul, the Ikhwan refer to the corresponding features between the Universal Soul and the human soul:

He who wants to know how the forms existed in the Universal Soul before they were emanated into matter, must consider the state of the forms of human artefacts, how they exist in men's souls before men manifest them in the materials that are the object of their arts, as we have explained in the epistle on arts. (B: , trans. Baffioni, in B: )

In addition to emphasizing the similarity between man and the universe as a whole, this passage compares the cosmological process of creation, which takes place through the Universal Soul, to the creation executed by an individual man. The human being is presented as a "creator on a small scale".

It is, however, not only the act of a human being which is seen as analogical to the act of God, but also the products of these acts. The skilled artist produces art, which imitates the ideals appearing at the macrocosmic level. A piece of art imitates the creation as a whole, for instance, in its proportions. In the Rasa.il, this is summarized in the epistle on music:

According to the same analogy and model that skilled artists produce their artefacts, whether shaped, scalped, or painted, so as to be proportionate to one another in construction, composition and arrangement, in all these respects emulating the work of the Creator, exalted be his name, and imitating his wisdom, just as it has been stated defining philosophy that it is an imitation of the deity to the extent that human faculties allow. (W: , trans. Wright, in W: )

Although the topic is treated in the epistle on music, not only the work of a musician,

but the work of any kind of compositor – especially that of a calligrapher – is seen as an imitation of the celestial harmony of proportions.

In the Jabirian Corpus, this topic is more explicitly linked with microcosmism and the field under examination is alchemy. In *Kitab al-awalim* (f. a), the author presents three worlds: the macrocosm, meaning the universe as a whole; the microcosm (*al-alam a.-.aghir*), referring to the human being; and the “mesocosm” (*al-alam al-awsa.*), which is the Art (*a.-.ina.a*) – referring to alchemy. In *Kitab ar-ra.ma* (), the concept of the third, intermediate world is derived from Plato, and Kraus (: ) remarks that usually the parallelism between three worlds in the Jabirian corpus is treated as a Platonic conception.

Another dimension of the analogy is given in *Kitab ar-ra.ma* (), where the nature of the Elixir is examined as the microcosm (see ..). In that context, the noblest product the alchemist creates stands in an analogical relation to the artist himself and to the world as a whole. Thus, not only the Art is considered to correspond to the microcosm (and the macrocosm), but also the one practising it – in the case of the Jabirian Corpus the alchemist – imitates the Creator. This is stated explicitly in *Kitab al-mizan a.-.aghir* (), where the author says that there are two kinds of creations, one accomplished by the Creator and one accomplished by the person practising the Art, which resembles the first.

In his division of the microcosm-macrocosm analogy, Allers (: –) presents “aesthetic microcosmism” as a variation of the holistic analogy. By this he refers, for instance, to the idea of “God as the great artist”. A similar interpretation of microcosmism is recognized by Brague (: ), who mentions alKindi and al-Farabi as scholars who employ it in Islamic philosophy. According to Brague, this form of the analogy also includes the definition of philosophy as the imitation of God, which was also seen in the citation from the epistle on music above. Although Allers’s as well as Brague’s definitions of aesthetic variation is quite loose, it seems that the examples presented above represent it, and clearly fall into the general category of holistic microcosmism, since they are about a human being creating around him an order, which forms a replica of the order appearing in himself.

## .. Cosmological Definition of Music

As has been seen, the Ikhwan’s theory of music is related to the structural and holistic microcosm-macrocosm analogies. Yet another interpretation of the analogy can be found in their musical theory when the overall definition of music is examined. Islamic mediaeval definitions of music have been divided into two branches. The first can be characterized as the cosmological theory of music initiated by al-Kindi. The second has more a practical perspective on music and its

most important representatives were al-Farabi and Ibn Sina. According to Leaman (: ), the major difference between these two branches is that for al-Kindi and his followers “what is important about music is what it reflects”, while “for al-Farabi and Ibn Sina what is important about music is what it does for us”. AlFarabi was himself a musician, which is probably the reason for his more practical approach to music. Amnon Shiloah (: –) characterizes the cosmological branch of musical theory as an ethical, cosmological and therapeutic approach to music and, according to him, in the Islamic context it reached its zenith in the Rasa.il.

Microcosmism in its broadest sense is present in the Pythagorean theory of music in various ways. First, the definition of earthly music as a reflection of the harmonies produced by the movements of the heavenly spheres is connected with the cosmological idea that the lower is a sign of the higher. The correspondence between the reality of the spheres and the material world under generation and corruption is seen to rationally lead to the Pythagorean definition of music, which is explained in the Rasa.il’s epistle on music in the following way:

The higher phenomena are primary causes to the phenomena that are in the world of generation and corruption, and their movements are the cause of the movements of the latter, and the movements of these imitate their movements, from which it necessarily follows that the tones of these imitate their tones. (W: , trans. Wright, in W: –)

A musician producing a replica of the order prevailing in the macrocosm is connected with the idea of a human being as an imitator of the Creator presented above. As we saw in ..., the proportions of the human body correspond to the heavenly spheres and, thus, music. Although regular musicians benefit from understanding

the mundane counterpart of the heavenly proportions, this is not necessary for the noblest of them, Pythagoras. In the Rasa.il, Pythagoras is treated as a prophet, and in the epistle on music (W: ) the Ikhwan argue that – because of the exceptional purity of his soul and wisdom of his heart – he was able to hear the movements of the heavenly bodies and derive the principles of music directly from the spherical music. He is mentioned as the first one to know the secrets of this discipline and among his followers are mentioned Nicomachus, Ptolemy and Euclid.

The third microcosmic aspect of music, as it is defined by the Ikhwan, is that the influence of earthly music is seen as a microcosm of the influence of its heavenly counterpart. According to the Rasa.il, the influence of music on the individual soul corresponds to that of the celestial music to the souls of the heavenly spheres and increases their cognisance of their noble origin:

Tones produced by the movements of the musician remind the individual souls that are in the world of generation and corruption of the joy of the world of the celestial spheres, just as the tones produced by the movements of the celestial spheres and the heavenly bodies remind the souls that are there of the joy of the world of the spirits. This is the conclusion derived from the premises associated with them by the sages, that is, their assertion that the states of secondary, caused entities imitate those of the primary entities that cause them. (W: –, trans. Wright, in W: )

During the centuries following the Ikhwan, the cosmological definition of music as such influenced mostly in the margins of the Islamic theory of music, and mainstream Islamic philosophers approached music from other perspectives: it was understood principally as a phenomenon of this world, and the supernatural did not have a place in definitions of music. The Pythagorean theory was, however, preserved as part of the Sufi theory of music (Leaman : ).

Allers (: –) presents the Pythagorean theory of music as an example of symbolistic microcosmism. As he notes, the difference between the structural and symbolistic analogies is difficult to make. In this case, however, the defining feature of symbolistic microcosmism, the “code” needed for understanding the system of correspondence, seems quite natural, since the secret of heavenly music is revealed in its perceivable form only to prophets.

## . CONCLUSIONS

The questions I posed at the beginning of the work were twofold. Most importantly, my aim was to study the meaning and use of the microcosm-macrocosm analogy: I aimed to find out what microcosmism reveals concerning the idea of man and to explore the ways the analogy is employed in the corpus. Secondly, my purpose was through these themes to examine the relationships of the texts to each other in this respect and especially the position of the Rasa.il among them. My main findings will be presented in this chapter. Although all themes will occur in each part of the chapter, I will start by examining the ways the analogy appears in the texts, then turn to the notion of the human being and, lastly, take a look at the chronological development of the idea in the corpus.

## . FORMS OF THE ANALOGY

The most important tool for analysing microcosmism turned out to be Allers’s sixfold classification of the analogy. It works well in the Islamic context and my threefold division correlates well with Allers’s categories. All forms of the analogy, as defined by Allers, can be found in the Islamic tradition. Elementaristic microcosmism is present in all parts of the study and, in accordance with Allers’s

definition of this form of the analogy, it takes the role of the basic analogy appearing in all of the studied texts. It is often connected with human-specific microcosmism. The structural form of the idea – which also leaves quite a variety of possibilities when drawing an analogy – is common too and takes the prominent position especially in the physiological aspect of the analogy. Not only are explicit physiological comparisons mostly based on the analogy at the structural level, but also the scientific theories connected to microcosmism are dominated by that. When it comes to more complex forms of microcosmism, such as holistic, symbolistic and – quite obviously – psychological analogies, these are found primarily in the spiritual or normative forms of microcosmism. There are some occurrences of the idea which do not fit into Allers's categories, like the microcosm of humanity, but these are scarce.

Regarding the division between metaphysical and metaphorical microcosmism, my aim to leave out the metaphorical form of the analogy poses some challenges. The same explicit comparisons stand as mere figures of speech for one author while they may have a deeper metaphysical meaning for another. This is the case, for instance, in the comparisons presenting the world as an anthropomorphic entity: in the frame of the worldview of the Ikhwan, they cannot be seen as pure metaphors, which is the case in many other texts. Also, any strict definition of the meaning given to the analogy is in many cases difficult to make: apart from the Rasa.il, in which microcosmism is obviously an essential part of the worldview, in most of the other texts the analogy appears much more rarely and cannot be examined as a crucial ideological element.

Explicit and implicit forms of the analogy are found in all three approaches to the analogy. The term microcosm is rarely used, even the Ikhwan use it less than twenty times in the whole Rasa.il. Nonetheless, some texts, like the Sirr, refer to the term more often. Restricting examination of microcosmism only to the contexts in which the term is used would obviously give different results from those found in the present study. When it comes to the other form of the explicit microcosmic idea, explicit comparisons, their occurrence in the corpus is much more frequent. Explicit comparisons appear in all three parts of the study. Their use, however, differs in some ways depending on the context. As descriptions of the human body, comparisons are longer and often go into the crudest details. Spiritual comparisons, on the other hand, are seldom so straightforward and are often used as narratives.

In this study the position of the microcosm was defined to concern only a/the human being. A relevant question in this respect is, whether the role of the microcosm is self-evidently granted to man in the texts, or does this definition form a problem? As for the Ikhwan, placing man in this role seems to be quite obvious.

There are some particular forms of the analogy which give other possible counterparts for the macrocosm, like those related to the anthropomorphic universe and comparisons between the city and the universe. Especially the latter do not, however, seem to dislodge the human being from the position of a microcosm: they can be seen to highlight the manifold correspondence occurring in the universe.

Thus, the analogical worldview does not solely concern the relationship between man and the surrounding reality: in many texts, including the *Rasa'il*, the correspondence between levels of reality is much more complex and usually the human being forms only one, albeit exceptional, level in these correspondences. In the Jabirian texts, for instance, the manifold nature of the analogy is a prevailing feature: it not only defines the relationship between two entities (e.g., the human being and the universe), but occurs at various – usually three – levels. It seems that in many cases descriptions of other correspondences, even if they are not explicitly linked with microcosmism, derive from the very same idea and also imply the analogy at the level of the human being. Hence, the appearance of man so often in these contexts shows that microcosmism is a doctrine concerning primarily the human being and the human being is at the centre of this web of correspondences. References to this manifold parallelism between various levels of reality occur more often in physiological microcosmism, but are not alien to the spiritual forms of the idea either: the idea is influential following the maxim of “the lower is a sign of the higher” in the context of epistemology and can be seen, for instance, in the hierarchy of scientific disciplines.

Examples presented in this study bring to the scene a variety of different macrocosms. Most comparisons in the cosmological context are, unsurprisingly, between man and the universe as a whole. In the comparisons treating the human being – his body or his soul – city-state comparisons are common. They are especially relevant when human perfection is examined – usually from its spiritual but also, as was seen in the Jabirian idea of the Elixir, from its physiological aspect. Heavenly spheres work as the counterpart for man in various contexts, in cosmological, spiritual and physiological comparisons, the last one being, however, the most usual in this context. In addition to these typical macrocosms, some analogies propose a parallel position with man, for instance, the entire kingdom of animals, human beings collectively or the order prevailing in a specific art.

## . THE IDEA OF MAN AND THE MICROCOSM

My study of microcosmism is divided into three chapters and this threefold division will also be used in these concluding remarks concerning the idea of man. As will be seen, many themes are relevant not only in the chapter dedicated to the topic but in other chapters as well.



## .. The Cosmological Position of the Human Species

The topic which brings together all themes related to human-specific microcosmism, is cosmology and the place of man in the cosmos. In the Rasa.il, one reason for the extensive use of the analogy is the cosmological system which fits well with this kind of analogical conceptualization. The cosmological system of the Ikhwan is kept rather simple and in their interpretation of Neoplatonic emanationism the universe appears as a unified whole which is quite easily paralleled with the human being. Especially elementaristic and structural forms of microcosmism are a natural part of cosmology in many other texts as well. There are, however, some central cosmological topics, such as the light metaphor, which are only loosely related to microcosmism.

Some explicit comparisons are obviously used to express cosmological views. This is the case when comparisons describe the universe as an anthropomorphic being. These comparisons do not necessarily have any metaphysical meaning for all the authors and the meaning given to them becomes evident only through more extensive examination of the use of microcosmism. In these contexts, the authors give little – if any – information about the concept of the human being and some of them do not even restrict the microcosmic position to man. Nevertheless, these comparisons provide a general cosmological frame for the topic of the universe or world as a whole as the macrocosm, which occurs in several more detailed comparisons treating the human being. Other examples of comparisons clarifying cosmological views are those which concentrate on the unity of the soul: their focus is sometimes on describing the function of the universe as a whole by means of man instead of expressing views regarding man through the cosmos.

In some earlier traditions, the motivation for the use of the microcosm-macrocosm analogy is related to cosmology. Man is like the macrocosm, because the primordial man worked as the model in the creation of the universe. .usi has mythological features in his references to the human archetype and some seem to appear in the explicit physiological comparisons of the Ikhwan and al-Qazwini as well. Only Suhrawardi, however, explicitly revives mythological elements in his texts. In his case as well, however, they are not much more than stylistic features. None of our Islamic thinkers explains the use of the analogy in the same way as is done in earlier mythologies. Even if microcosmism came to them partly from the Eastern mythological tradition, the motivation for the analogy is necessarily different in the Islamic context: Islamic thinkers did not adopt the explanation for the analogy from earlier mythology. This, obviously, was because they had their own mythology.

Like any other philosophical notion, the microcosmic idea is assimilated to the Islamic worldview. As an example of this we could take the contexts in which

the Ikhwan express their religious views through microcosmism. This is nothing exceptional: the Ikhwan frequently verify their philosophical views with holy revelation. The recurring Qur.anic verse is “your creation and your upraising are but as a single soul” (Q. :). In the *Rasa'il*, the verse is attached to the microcosm-macrocosm analogy, on the one hand, as a confirmation for the existence of the Universal Soul and, on the other hand, as an approval of the idea of the human archetype. The influence of religion can also be seen in letter-symbolism emphasizing the importance of the Arabic language as well as in some comparisons which are taken to the level of the godly presence – a phenomenon occurring, however, only occasionally in the work.

That the human being – from among all beings – is put in the microcosmic position emphasizes his central role in the created world and in the cosmos as a whole. This is not exceptional for thinkers representing a monotheistic worldview. In some cases, the views of the Ikhwan appear in this respect somewhat original and even contradictory. This can be seen when animal features are described as being summarized in the human being. The Ikhwan define this as something positive and it implies a positive attitude – or even a humanist approach alien to the Middle Ages – towards other animals. Man is defined as one of the beings in the sublunar world and despite his position as the vicegerent of God on earth, the Ikhwan demand from man some humility towards other species – a theme that arises from time to time in the 4th epistle. Like most other authors, the Ikhwan, however, also take it as a bestial feature in man that he epitomizes animal characteristics. In this they follow the negative attitude towards the cosmologically lower beings – a common view for their times.

A predominant feature in human-specific microcosmism is the middle position of the human being among the created. This is prevalent not only in the contexts in which it is explicitly mentioned but in most cases of human-specific microcosmism. Man is considered the middle being in the universe on account of many of his corporeal and spiritual aspects, and this also influences the epistemological views of the authors. A basic idea is the psychophysical whole that man forms, which is connected more generally with the question of the body-soul relationship.

This aspect of the middle position of man is contrary to one form of the human-specific microcosm-macrocosm analogy: the human archetype as the microcosm.

In their microcosmism, the Ikhwan concentrate on man's corporeal aspect or on man as a psychophysical whole more than on the human soul. However, the human archetype is a purely spiritual being and, for this reason, his microcosmic position should be understood in a different manner from the other interpretations

of the analogy. This might also explain why the microcosmic role of the human archetype is only treated in separate contexts in the *Rasa'il* and does not appear in the microcosmic epistles at all.

This is not, however, the only discrepancy in the Ikhwan's concept of the human archetype: another has to do with the relationship between the species.

Suhrawardi's view of this matter is evidently Platonic, whereas the Ikhwan take an ambiguous position in this discussion. On the one hand, the human being is a link in the continuous chain of being, in which their views come close to evolutionism. On the other hand, the complete opposite to this, Platonic idealism with its strict borders between the species may be read from the *Rasa'il* as well.

Yet another noteworthy topic arises especially in the discussion on the human archetype as the microcosm and it is essential for the whole topic of the third chapter of this study. When the human archetype is described as the microcosm so many different aspects of the idea are mentioned that these contexts seem to define microcosmism of the Ikhwan more generally. This question is not only discussed in the third chapter dedicated to the topic but also in the fifth chapter.

There are some contexts which obviously treat humanity as a whole – namely the human archetype – as the microcosm, but usually such a distinction is not easy to make. None of the studied texts explicitly restricts the microcosmic position to the human being as a representative of his species or claims that it would only be an individual man who may become a microcosm through perfection. Contrary to Izutsu's view, this is not, in my opinion, the case even in Ibn 'Arabi's *Tadbirat*. In it, man is seen as an all-encompassing being at the cosmological level, but the same analogy is used to describe the perfection of a human individual. These different levels do not contradict each other, because they are defined in different ways.

The position of the Ikhwan in this cannot, in the light of the evidence, be completely recognized. If microcosmism in the *Rasa'il* was examined solely in the two epistles dedicated to the analogy, there would be no reason to assume that the Ikhwan define microcosmism as a specific feature of the human being. It is only elsewhere – in the passages treating the human archetype and in some epistemological

contexts – that the Ikhwan express the all-encompassing position not as a feature of an individual man, but as that of the universal human form. The question is that, if the human archetype is behind all microcosmism, why would such a topic be left out from the epistles treating the idea? One explanation for this may be that it is considered a self-evident fact which is not worth mentioning. In the 10th epistle, however, there are passages which seem to contradict this idea. I find it hard to believe that, for example, the intention of the story of the wise

king, obviously an essential chapter of the epistle, would not be connected with human perfection and intended as a description of the path to perfection for an individual man, even if not directly connected with the mystical variations of the same topic. More than defining microcosmism in general, the way to attach the human archetype to various forms of the analogy can be seen as a particular level of microcosmism and an indication of the way the analogy prevails at various layers of the idea of man in the Rasa.il.

## .. The Question of Corporeality

An essential question was what microcosmism reveals about corporeality. The physiological aspect of the idea appears to some extent in most of the studied texts. In the earliest texts more closely attached to the Hermetic tradition, consideration of the human body as a microcosm is a very basic part of the whole idea of man. In the Sirr, the microcosm-macrocosm analogy appears in various forms, including its spiritual and human-specific forms, but the analogy is, however, primarily physiological. Components of microcosmism in the Sirr are astrology and, partly related to this, the features it shares with Greek Hermetic microcosmism. Explicit physiological comparisons – regarded by Marquet as characteristically Hermetic – are, however, scarce.

The corporeal aspect receives much attention in the Ikhwan's idea of man even in some areas which are not so evident. The Ikhwan demonstrate their respect for the bodily aspect of man, for instance, in their epistemological views, in which man's twofold nature as a psychophysical whole is accentuated and sensory knowledge is given an essential position. A similar feature is perceivable in their handling of self-knowledge: in many contexts one can see that the self to be known consists of both spiritual and material aspects, and knowledge concerning the material world is central also in achieving the higher type of gnosis. In comparison to the Ikhwan, al-Ghazali seems to be more ambiguous about this. Although he clearly leaves the bodily aspect of the human being outside the concept of selfhood, he refers to contemplation of one's own body as a means to achieve divine knowledge.

In the Rasa.il, a unique element in Islamic thought appears, which emphasizes the Ikhwan's interest in the structure of the human body: their aesthetic treatment of human measurements. It not only works as a clear indication of their special admiration of harmonic proportions, but also attaches the corporeal aspect of man to the cosmological and astronomical dimensions of microcosmism.

Most evidently the interest of the Ikhwan in the bodily aspect of man can be seen in their extensive use of explicit physiological comparisons. In these, the human body is not only admired but also views concerning its composition are

expressed through the analogy. As for the Ikhwan, the human body is an organism constituted of different parts and organs whose functions are seen to be similar to and even dependent on other layers of reality: an essential aspect of the corporeal microcosmism is its close attachment to astrological views. In physiological comparisons, mythological and Hermetic influences are obvious and may have had an impact on the overall concept of corporeality as well.

A prevailing feature especially in the physiological comparisons of the Ikhwan is their constant use of certain numbers. The value given to numbers explains their position and recurrence in the analogies: the same numbers reappear in the comparisons between man and the surrounding universe, emphasizing the nobility of certain numbers and giving a “mathematical” dimension to microcosmism. This aspect also works as a way of highlighting the appearance of the analogical worldview at various levels of reality. Even if it would sometimes be easy to find different numbers of, for example, materials of the human body, the Ikhwan tend to restrict their number to nine, which corresponds to various layers of reality.

Comparisons concentrating on the human body are often attached to cosmological and scientific ideas. Although – apart from some particular terminological references appearing in comparisons – scientific theories are rarely explicitly linked with microcosmism, sometimes the wider meaning of explicit comparisons become evident only in the frame of the scientific worldview. In many examples of the scientific role of the analogy, especially when it comes to astrology, microcosmic man is described not only as corresponding to, but also depending on the macrocosm. This sometimes brings a practical dimension to the speculative nature of the analogy. This is clearly seen in music therapy, which is a good example of the role of microcosmism in the very widely spread and long-lived theories. On the other hand, explicit comparisons may also work as an inspiration for developing some more marginal scientific ideas.

Although for many authors physiological microcosmism forms part of the very core of their worldview, a search for metaphysical claims behind the analogy is not always reasonable. Even in texts which clearly affirm the metaphysical meaning of the analogy, explicit comparisons – mostly in their physiological, but also in their spiritual form – are often used for stylistic purposes only with no intention of expressing any more profound philosophical views through them.

.. A Microcosm – Perfect Man or Anyone?

If physiological microcosmism is more often attached to wider scientific and cosmological views, in the spiritual aspect of the analogy, the focus is more clearly

on the idea of man and the order appearing in him. Comparisons concentrating on the spiritual aspect of man can be seen to express the ways the human soul and the selfhood of man are defined: which part of man is seen as the dominant one and how do these different aspects of the human soul work and co-operate?

These comparisons indicate the hierarchy appearing in the human soul. The faculty placed on the royal throne indicates a great deal about the author's idea of man. In this, we can see some differences between comparisons with epistemological and mystical or ethical intentions: while the highest post-sensational faculty often rules in the former, the soul or spirit keeping its headquarters in the physical heart plays the same role in the latter. Nevertheless, many texts, including the *Rasa.il*, take various different positions depending on the context and purpose of a particular comparison.

Even more than in physiological comparisons, the psychophysical holistic nature of man is emphasized in the comparisons concentrating on the spiritual aspect of man. Although the purpose of the comparisons is obviously to describe the spiritual aspect of man, the corporeal is often included in the comparisons as well, at least in expressions of the physiological locations of the human faculties. In this way even Sufi authors, whose primary interest is in the spiritual development of man, involve the human body in their rhetoric. Especially in the views of Ibn .Arabi the way to consider the human body as a tool for the inner faculties is emphasized.

### Al-Ghazali

and later Sufis lay special emphasis on the third level of the correspondence, namely God. For them, microcosmic man not only corresponds to the created world, but also to the divine attributes. In this way, microcosmism enables a connection with the divine. This also makes self-contemplation part of the spiritual path and the practice of mysticism. Thus, in the process of human perfection, the analogy takes on an educational role, which is clearly seen in the ethical spiritual comparisons of al-Ghazali. In these, the most essential feature of the spiritual comparisons occurs in an evident form: they are expressions of the achievement of the ideal state of man.

It can be seen that Brague's claim concerning the lack of the ideal or normative aspect in Islamic microcosmism is incorrect. Views connected with the imitation of the macrocosm can be found not only in Sufi writings, in which they are evidently the prevailing theme in the whole microcosmism, but in most texts of the corpus including the *Rasa.il*, the *.Aja.ib* and Jabirian works, and in many of them they also appear to be connected with the term microcosm, which is explicitly denied by Brague.

Although some comparisons express the tragic state of most of the human kingdoms ruled by devil forces, in all themes treated in the fifth chapter of this study, microcosmism is also used in order to describe the ideal order appearing in the perfect man. This can be seen in explicit spiritual comparisons and in descriptions of the human mind as a reflection of al-Law. al-Ma.fu.. In them, the analogy is often employed in explaining the ideal order according to which the human faculties or parts of the human soul should work. The branch of microcosmism which Allers refers to as psychological – related to Islamic epistemological views in both of its main branches but especially in its Platonic interpretations – was seen to be closely connected with imitation as well. Also the example of aesthetic holistic microcosmism presents the microcosmic position of man as an ideal.

Even if human-specific microcosmism concentrates on the actual state of the human being as the microcosm, the potential aspect of the analogy is in some cases present in that context as well. This is the case when the human being is examined as a microcosm to epitomize animal species. Also when it comes to the middle position of man between devil and angel, which is usually described as an actual, innate feature of the human species, some normative, idealistic connotations can be found. In these contexts, potentiality also occurs, not in the form of urging one to become a microcosm, but as advising one to get rid of this suspect state giving up the lower part of the self together with its bestiality. Nevertheless, some, like Ibn .Arabi, see the middle position of man as his ideal state. This is also emphasized in his physiognomic views, which highlight the moderate aspect of human characteristics as an ideal middle-way.

Physiognomy also works as an example of scientific theories using the idea of the human body as a microcosm in the context of human perfection and is, in this way, also connected with the ideal man at the spiritual level. Ibn .Arabi's treatment of physiognomy shows that the physiological microcosmism – even if it seems in its contexts and purposes to differ greatly from the spiritual normative analogy – may actually be closely related to it.

Another example of the perfection at the physiological level is Jabirian alchemical theory. The texts attributed to Jabir ibn .ayyan clearly concentrate on the physiological aspect of man and in them it is a prevailing idea even in the concept of perfection. The harmony of opposing forces is seen as an ideal for all levels of reality from minerals to human beings: it appears in the perfect man as well as in the perfect metal. A key to this, the Elixir, corresponds to the order appearing in microcosmic man. Talking about the ideal state, we talk about a physical state – or at least of a state explained in terms of physiological factors. In this

way, the physiological microcosmic idea forms part of the Jabirian theory of perfection of any being, including that of an individual man.

In the *Rasa'il*, human perfection is closely related to knowledge, and knowledge, on the other hand, is in the key position of their whole microcosmism. In their epistemological views, the Ikhwan treat knowledge as a means of salvation. According to them, one needs to know oneself in order to gain any kind of knowledge, because self-knowledge is the first step in all sciences. Even if the Ikhwan refer to the Delphic Maxim, it seems that for them the knowledge that man can deduce from self-knowledge primarily concerns this world. As a microcosm, man can, by contemplating himself, acquire knowledge concerning the world around him and understand its structure and functions, which on account of their abundance would otherwise be unreachable for an individual man. The microcosmic position as a means to achieve knowledge is implicitly also present in their theory of knowledge: the human soul is a potential microcosm which through acquisition of knowledge turns into an actualized microcosm.

A central question posed in this study was the motivation for the idea: why is the microcosm-macrocosm analogy developed and taken into the centre of philosophy by the Ikhwan? Like many others, the Ikhwan for the most part leave the question open in their texts and the doctrine is not given a straightforward explanation in the *Rasa'il*. It seems, however, that the main motivation for the parallelism is related to epistemology. Considering, firstly, various contexts in which microcosmic man is treated in connection with knowledge and, secondly, the close ties of the topic with self-knowledge in the work, the closest we can get in explaining the motivation for using the analogy by the Ikhwan is epistemological purposes. Often the aim of expressing microcosmic views – even those related to the physiological aspect of man – is making the world knowable for a human being, which is phrased explicitly thus in the 11th epistle.

## . THE RASA'IL AND THE DEVELOPMENT OF ISLAMIC MICROCOSMISM

Defining the overall place of microcosmism in mediaeval Islamic thought was not one of the purposes of this study, but in the light of the presented examples it can be seen that some of its forms was far from being marginal. The appearance of the physiological microcosmic idea – for instance in the form of astrological embryology – in some mainstream scientific works, shows that the analogy as such was not regarded merely as pseudo-science. It was considered, at least, as something worth mentioning and opposing. This can also be seen in the case of the theory of knowledge. Even if Islamic thinkers rarely explicitly connect the microcosmic idea to their epistemological systems, it is part of the theory of knowledge in both of its main branches. As regards the explicit form of the analogy, only the metaphorical



variations of it, such as the description of the universe as an anthropomorphic being, can be regarded as widely spread ideas in Islamic thought.

In its metaphysical physiological form microcosmism has often been considered something particularly Hermetic in Islamic mediaeval thought. In the present corpus as well, this aspect of the analogy has received more attention in the texts more closely related to Hermeticism. Spiritual comparisons which concentrate on epistemology and ethics – themes that were predominantly treated by the Sufi authors of the corpus – have, on the other hand, often been connected with the Greek philosophical origins of the analogy. It would be tempting to say that the Ikhwan, extensively interested in both aspects of the idea, form a synthesis of these traditions. Such a division, however, even if it to some extent applies to the corpus, oversimplifies the issue: explicit physiological comparisons also occur in the texts of the Sufi authors and the spiritual aspect is not left out even in the most obviously Hermetic works of the corpus.

Nevertheless, it can be said that the earliest texts of the corpus, the Sirr, Jabirian Corpus and the Rasa.il, share in their microcosmism a special interest in the bodily aspect of man. Taking into account the close ties of these texts between each other, one might expect some exchange of influence between the texts in this respect. Nonetheless, their approach to physiological microcosmism differs greatly from each other. As strongly alchemical works, the Sirr and the Jabirian texts are, for instance, far more interested in the four elements than the authors of the Rasa.il. In other areas of the analogy, similarities appear in such common themes

– such as the middle position of man or man epitomizing animal species – that they do not give reason to assume any more specific relations between the texts.

Especially in the case of the Jabirian texts, this is somewhat surprising and the topic requires more extensive study. In general, microcosmism is more developed and manifold in the Rasa.il than in the texts preceding it. Even if the Ikhwan do not develop the variety of the analogy themselves, they bring together a wide range of earlier elaborations and amalgamate them into their worldview in an exceptional way.

Proving the transmission of ideas is always difficult, but the importance of the Ikhwan for the later development of microcosmism in its physical form – especially when it comes to explicit physiological comparisons – is evident. A few short explicit comparisons can already be found in the Sirr. Longer listings occur in the Rasa.il and because of their quite rare use in the Islamic tradition and the formerly proved influence of the Ikhwan on the texts in some other areas, there is

reason to assume that the Ikhwan transmitted – directly or indirectly – if not the whole idea, then at least some particular comparisons to some later texts.

An obvious example of this is Ghayat al-.akim. There, references to explicit comparisons – mostly to physiological, but also to spiritual comparisons – are presented in similar forms to those of the Rasa.il and the chapter treating the topic makes only a few additions to microcosmic views which cannot be found in the thought of the Ikhwan. Another text obviously related to the physiological comparisons in the Rasa.il is the .Aja.ib. There one can find a long and detailed comparison between man and the city, which is very similar to a comparison of the Ikhwan. The appearance of physiological comparisons in Ibn .Arabi's writings might also be connected to the Rasa.il, but he is more likely influenced by the general idea rather than individual comparisons.

Despite their emphasis on the earthly, the Ikhwan start to form a basis for the mystical interpretations of the microcosmic idea. There are some interesting thematic resemblances, although no straightforward influences can be shown between the Ikhwan and Sufi interpretations of the topic. Ibn .Arabi's views have various similarities with those of the Ikhwan: in addition to the uniqueness of number four and some explicit physiological comparisons, the two share the astrological aspect of the spiritual comparisons. In al-Ghazali's works, on the other hand, the analogy develops many dimensions which are not present in the Rasa.il. In his explicit comparisons, the analogy is primarily used to express ethical ideals. The examples from Suhrawardi are few and no remarkable similarity to the Ikhwan can be perceived in them. More extensive examination of the production of all these three authors would, however, be required in order to gain a comprehensive understanding of their microcosmisms. When it comes to al-Ghazali and Suhrawardi in general, their elaborations of the topic in comparison to those the Ikhwan are more useful in defining the specific features of the use of the analogy than in tracing influences between the texts.

In the more implicit forms of microcosmism, the role of the Ikhwan as transmitters is even more difficult to affirm. As regards the scientific disciplines related to the analogy, it can be seen that the embryological views – and the microcosmism – of .usi's Raw.a were possibly influenced by the Rasa.il. In general, the treatment of astrological embryology does not necessarily indicate that the author would have considered it to have anything to do with microcosmism, but the way these two are presented in both the Rasa.il and the Raw.a suggest that the authors consider the theories to be connected.

The microcosm-macrocosm analogy still had an essential role in the thirteenth century popular scientific idea of man as can be seen from the writings of al-Qazwini. Al-Qazwini uses the analogy in various forms in a fashion similar to the Ikhwan's and it is a central element in the chapter treating the human being, taking human-specific, physiological and normative forms. Despite the author's interest in the topic, it seems that it does not have the same metaphysical meaning as in the *Rasa'il*. Explicit comparisons appearing in the text lack some metaphysical dimensions essential for the Ikhwan and astrological embryology is mentioned, but not discussed in detail. This indicates that in the popular encyclopaedic tradition represented by al-Qazwini, the microcosmic idea is used explicitly, albeit primarily as a curious metaphor. It is an attraction for the imagination of the reader and enlivens the text. For the authors of the *Rasa'il*, on the other hand, it is evidently a strong metaphysical argument to be understood literally – perhaps not in each and every individual occurrence and detail, but as a whole.